

FIG. 1

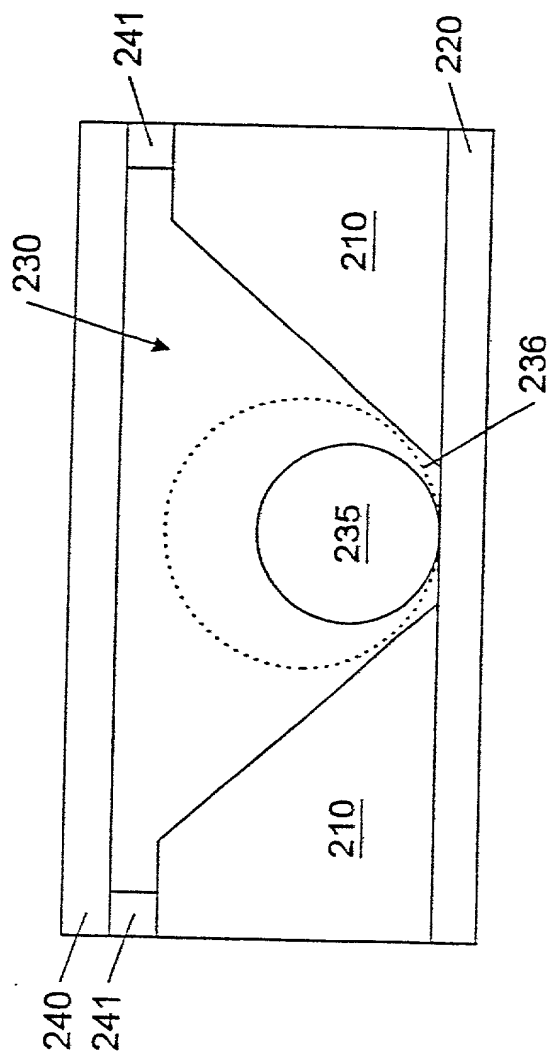
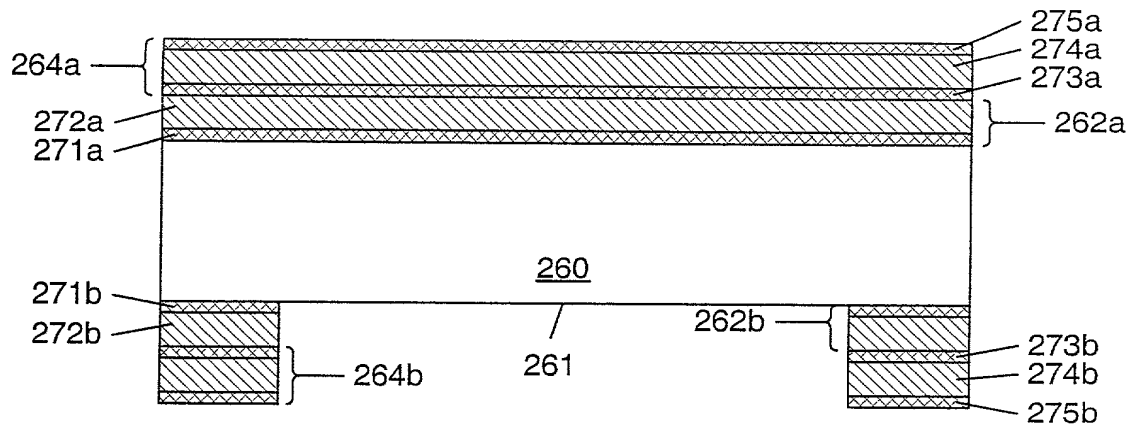


FIG. 2



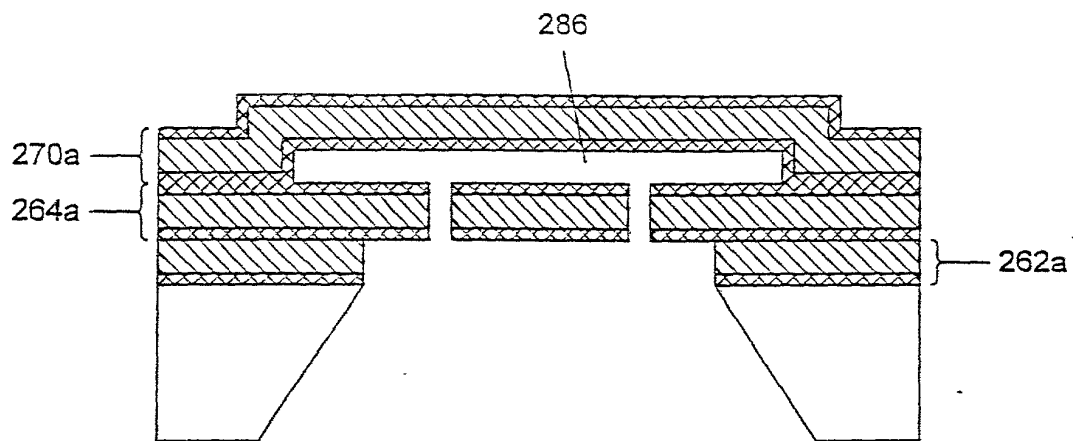


FIG. 4D

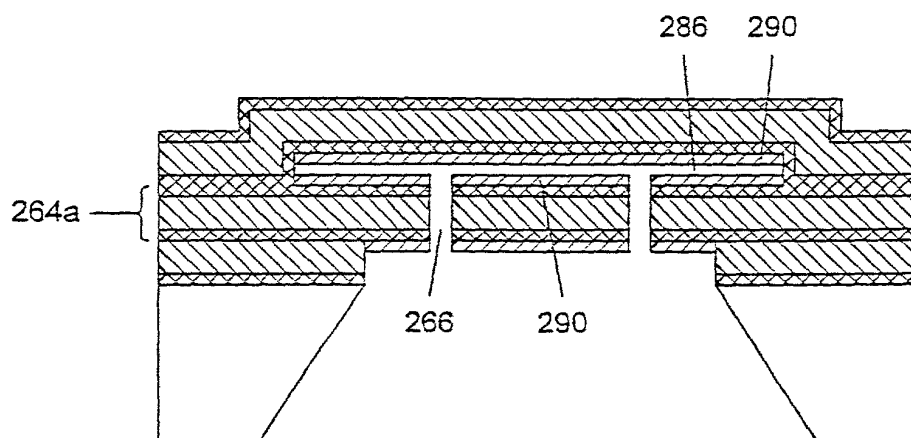


FIG. 4E

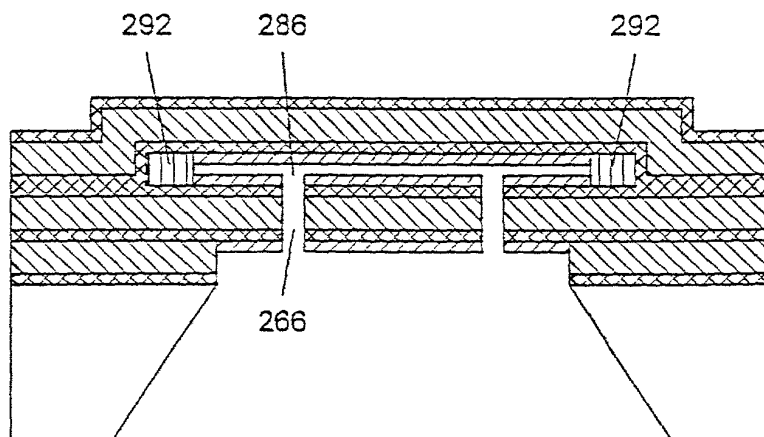


FIG. 4F

FIG. 5

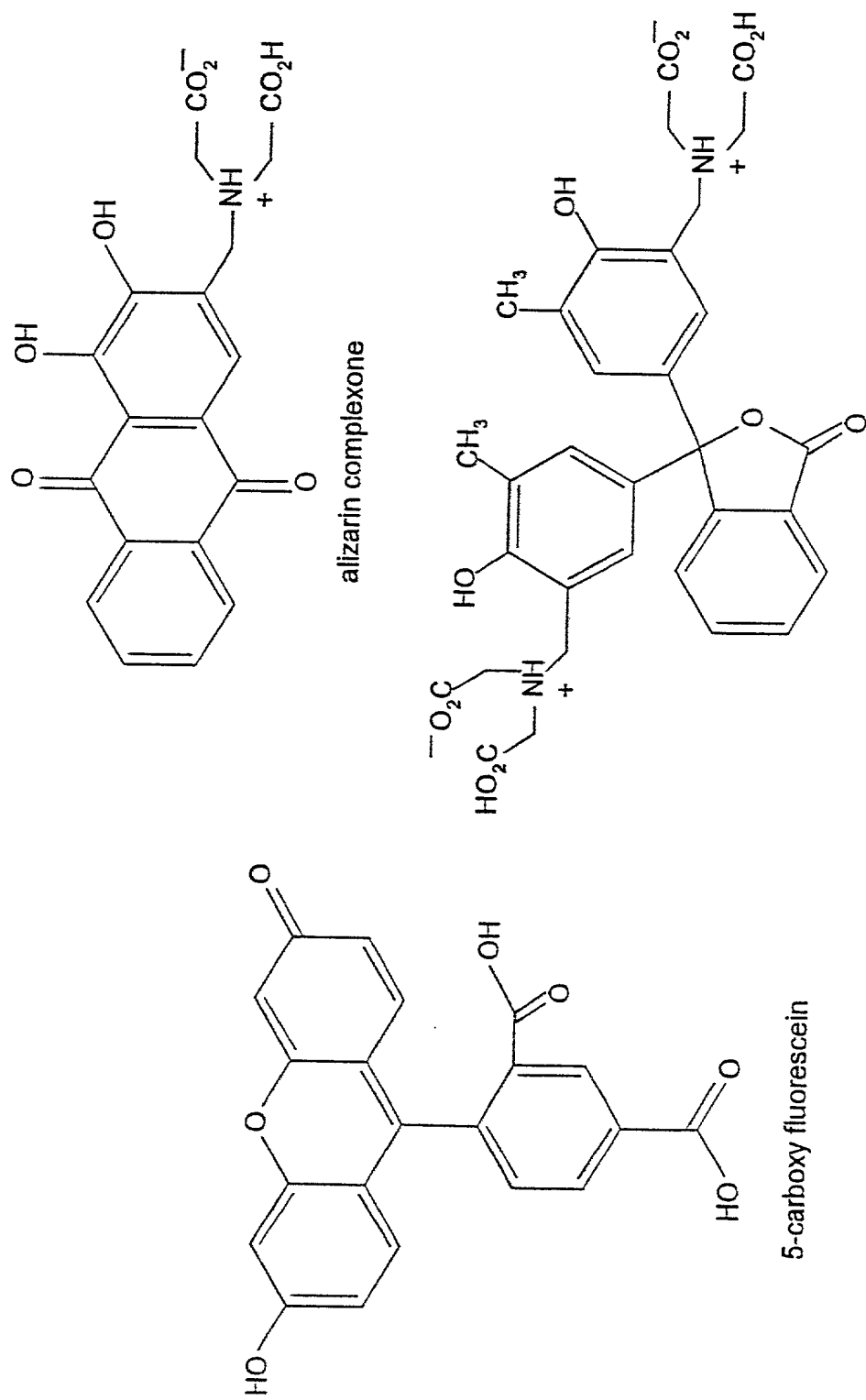


FIG. 6

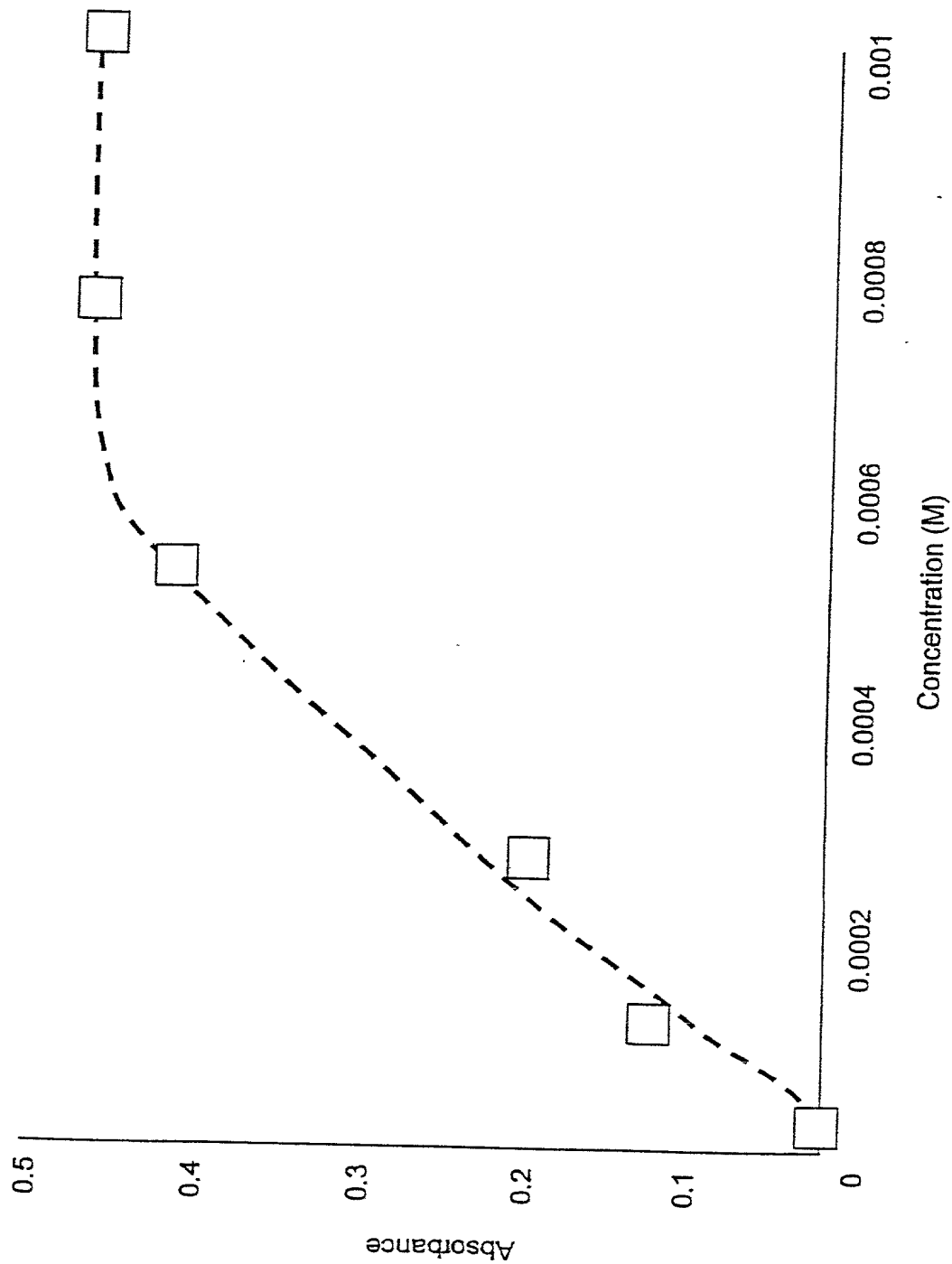


FIG. 7

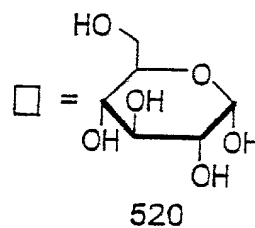
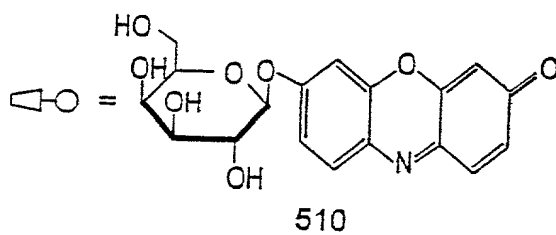
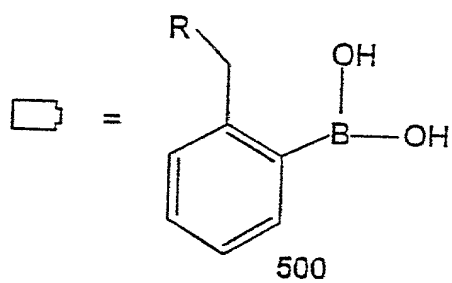
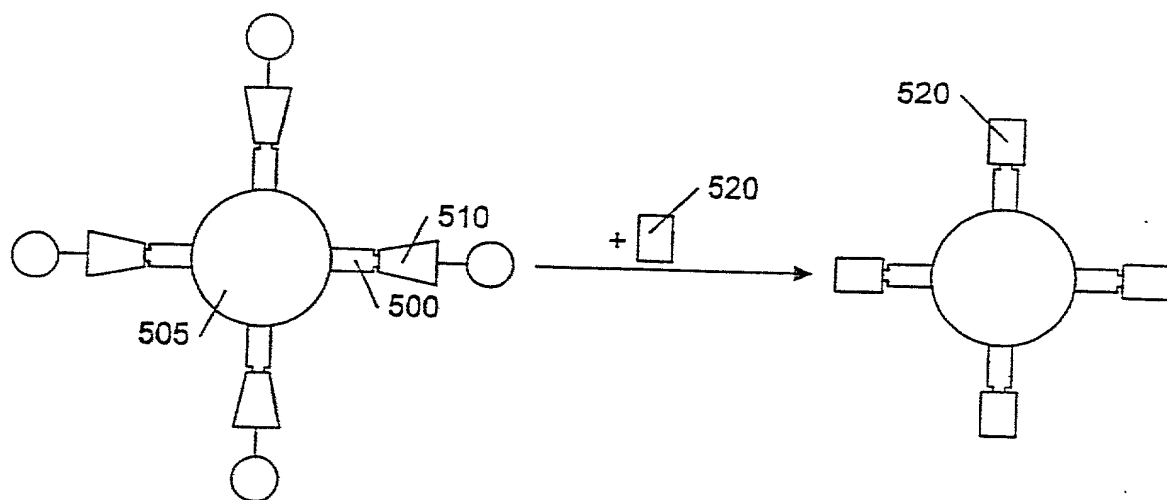
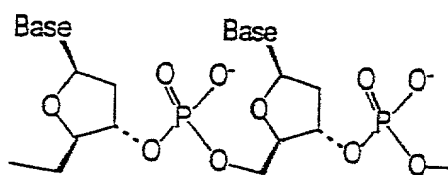
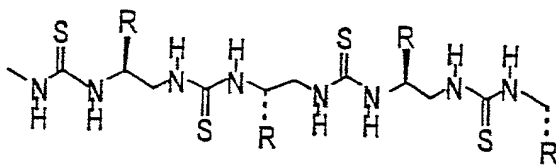


FIG. 9

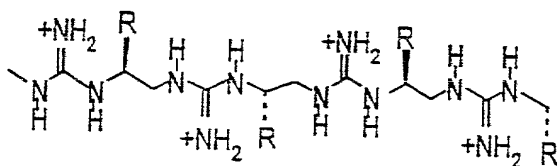
Peptides



Nucleotides



Polythioureas



Polyguanidiniums

FIG. 10

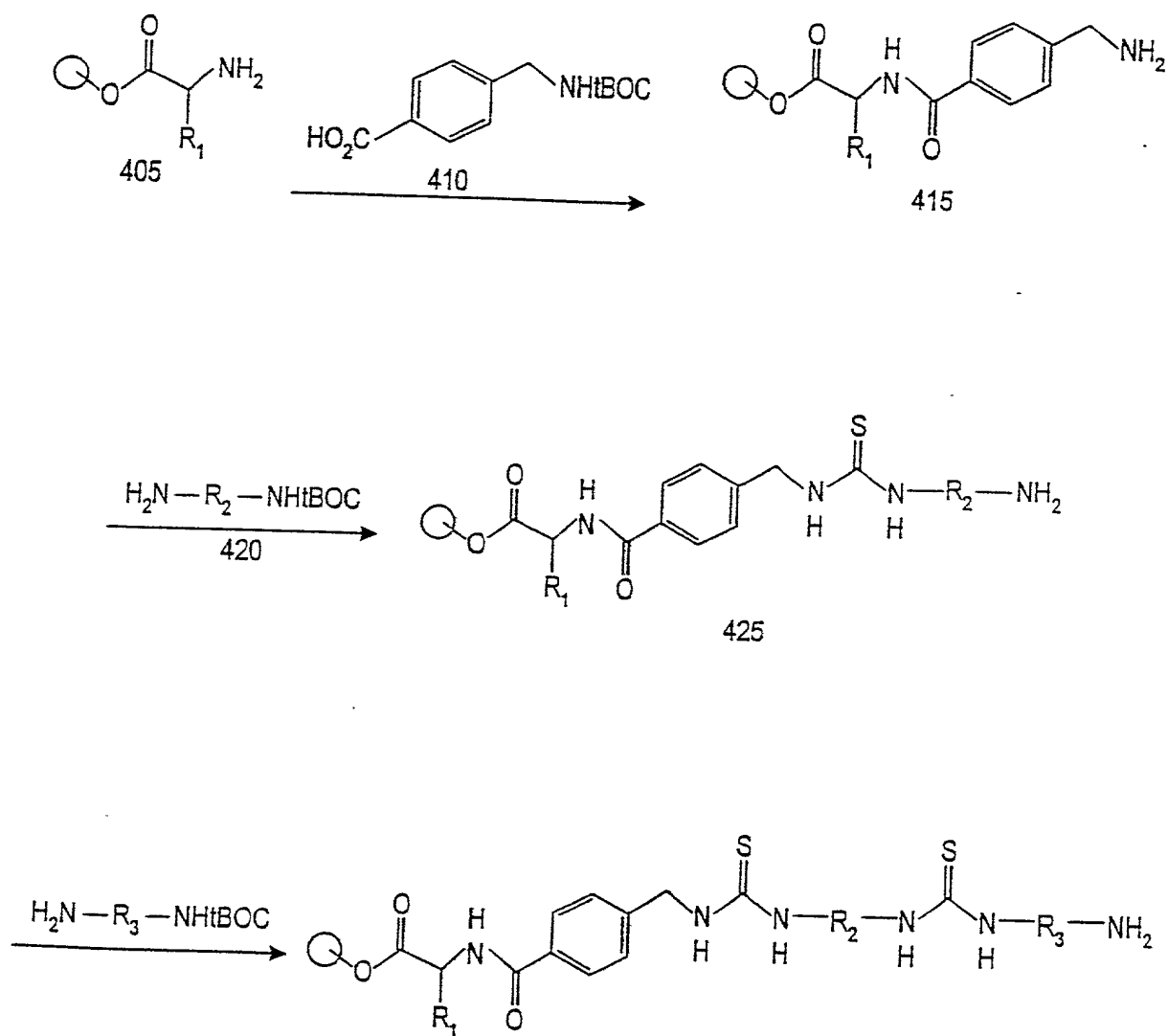


FIG. 11

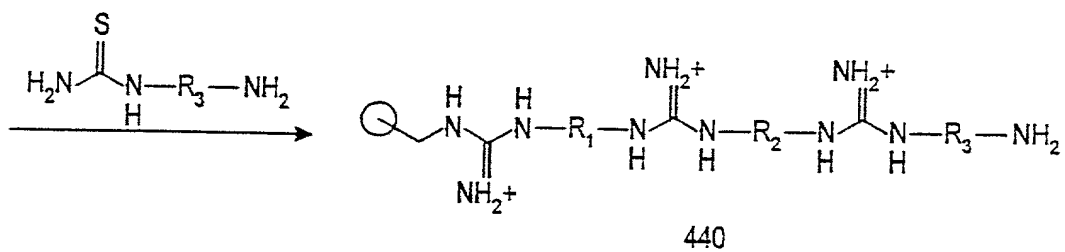
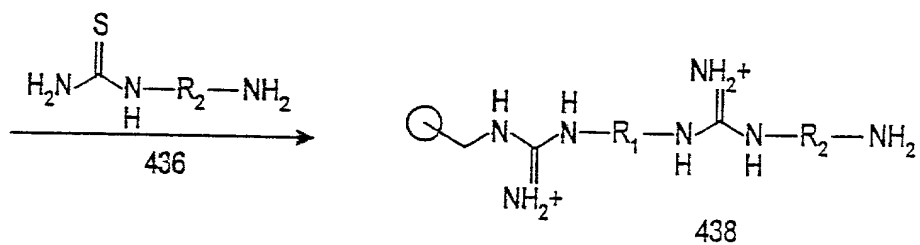
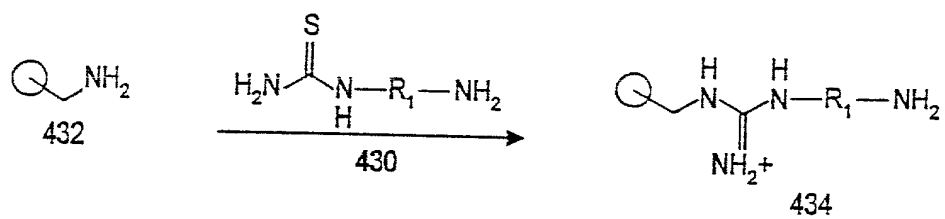


FIG. 12

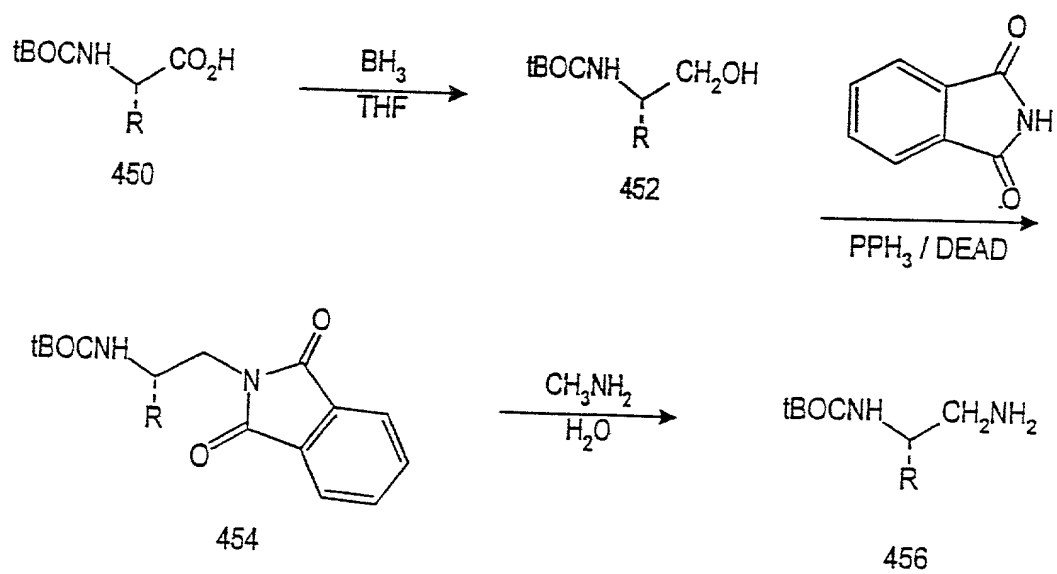


FIG. 13

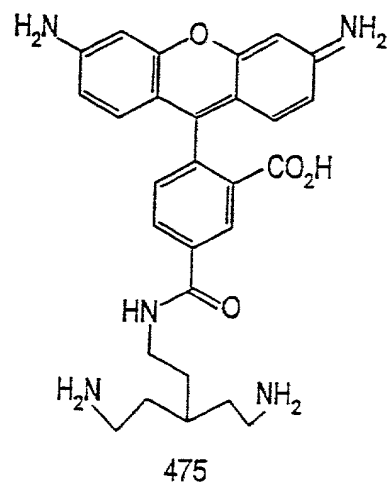
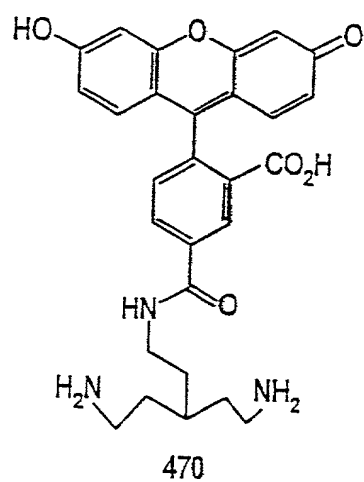


FIG. 14

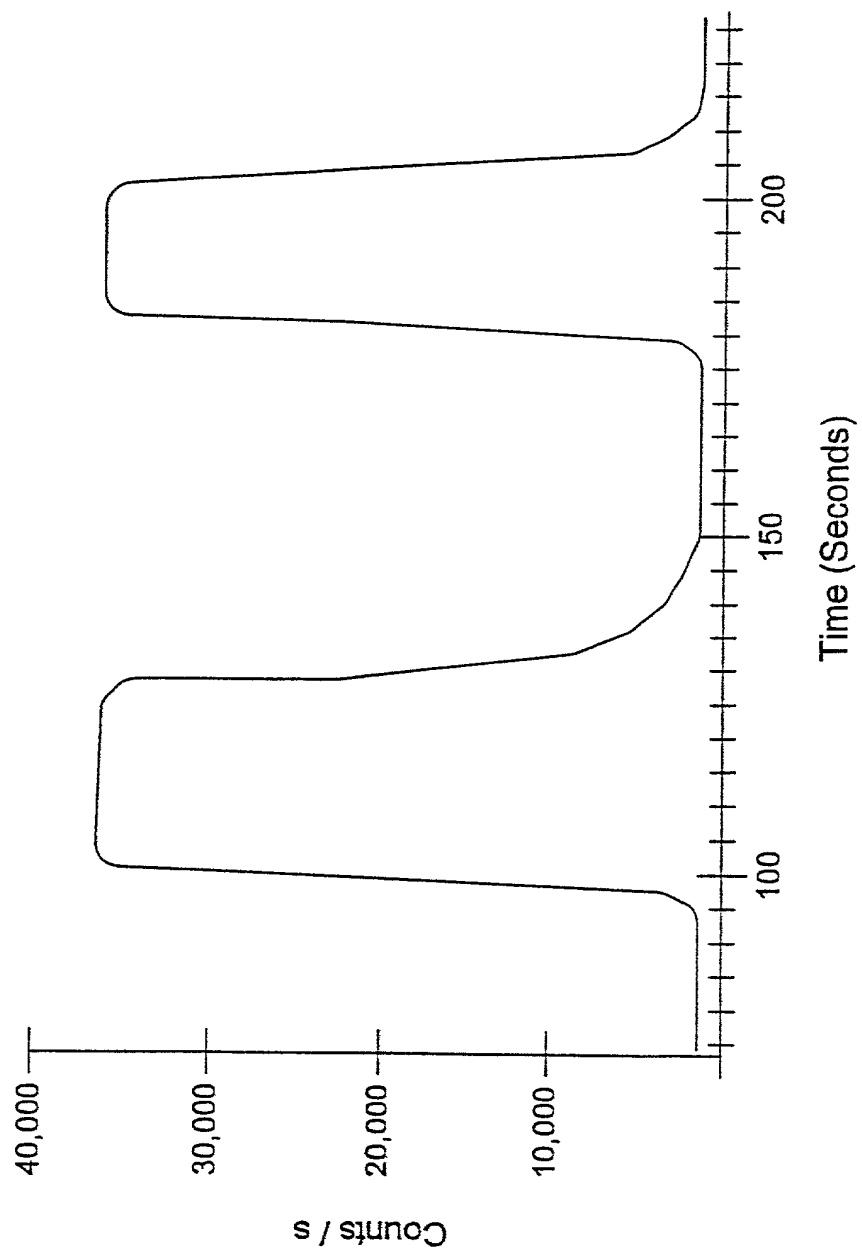
[illegible]

FIG. 15

RESIN: pH Ion		Blank	Alizarin	o-Cresol-phthalein	Fluorescein	Alizarin-Ce ³⁺ complex
2	none					
2	Ca ²⁺					
7	none					
7	Ca ²⁺					
7	F ⁻					
12	none					
12	Ca ²⁺					
12	F ⁻					

FIG. 16

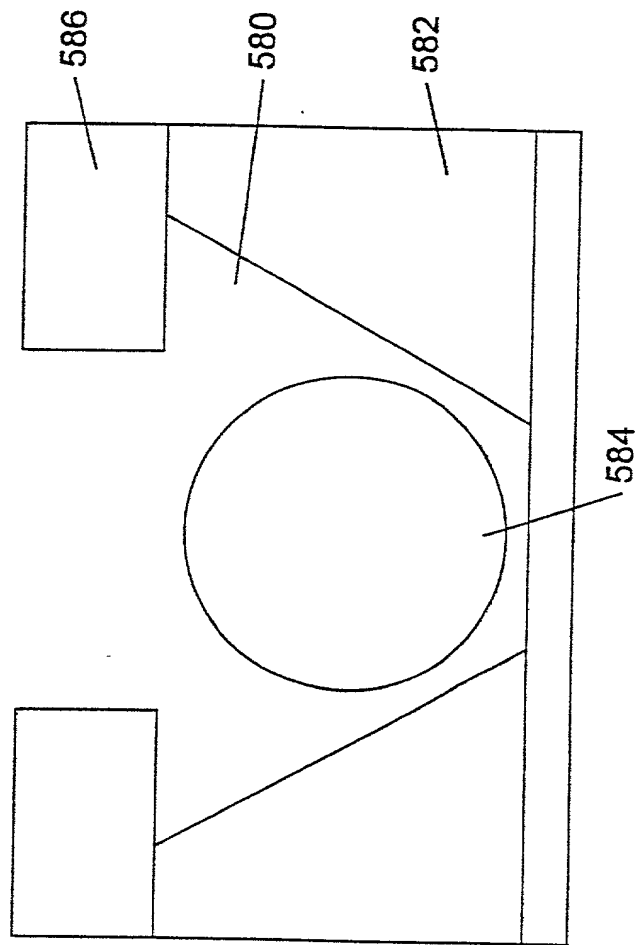


FIG. 19

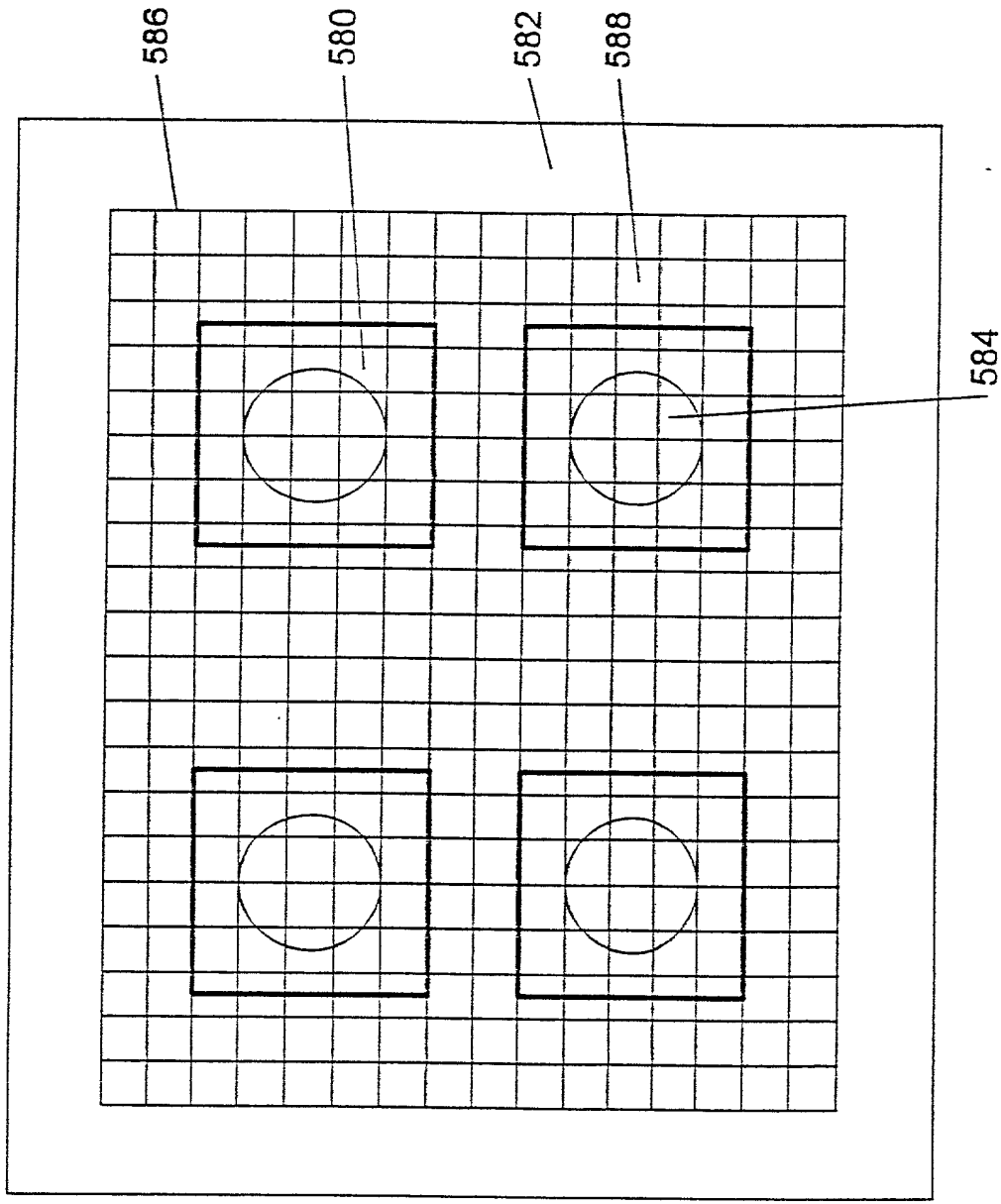
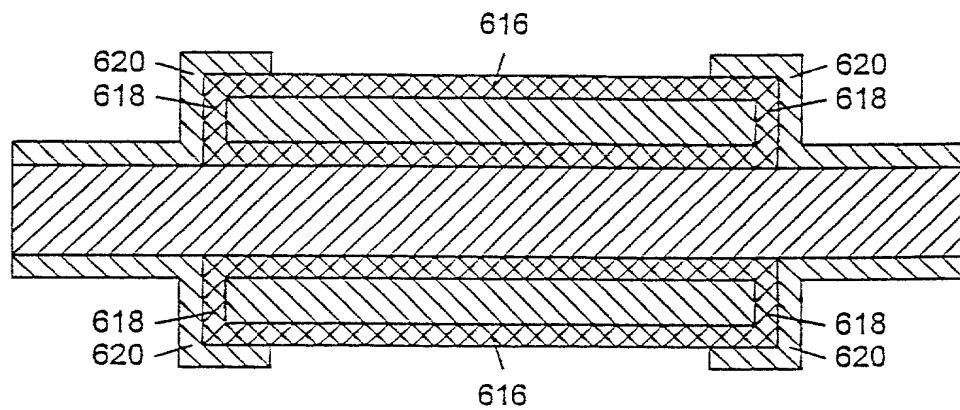


FIG. 20



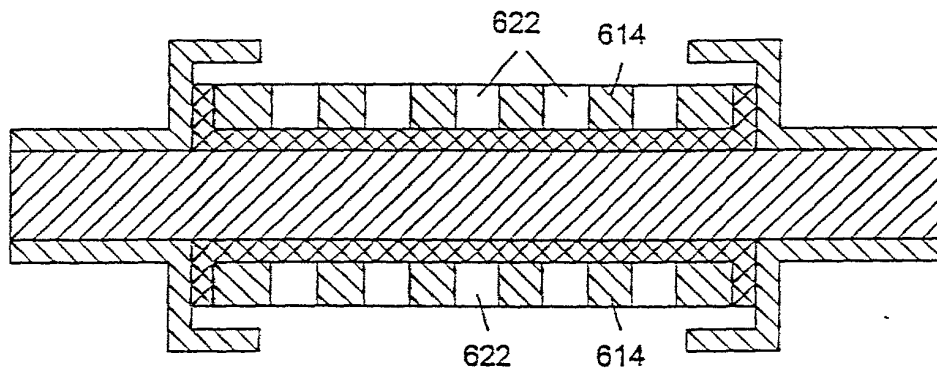


FIG. 21D

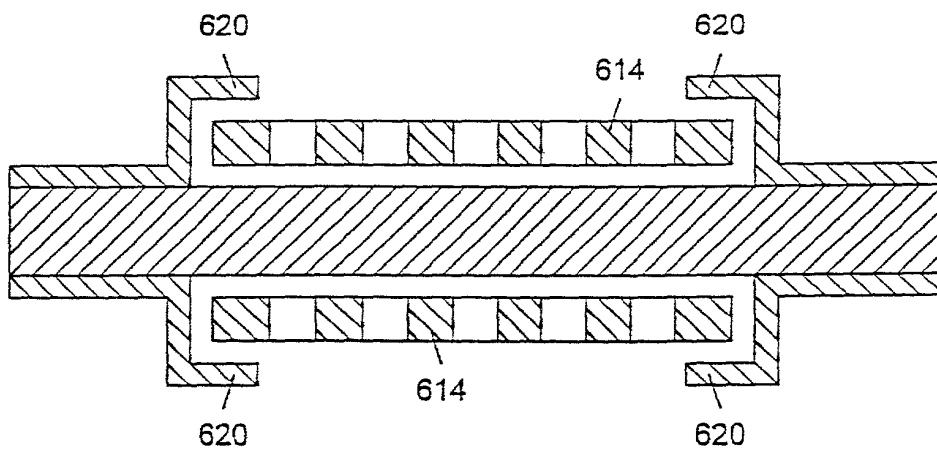


FIG. 21E

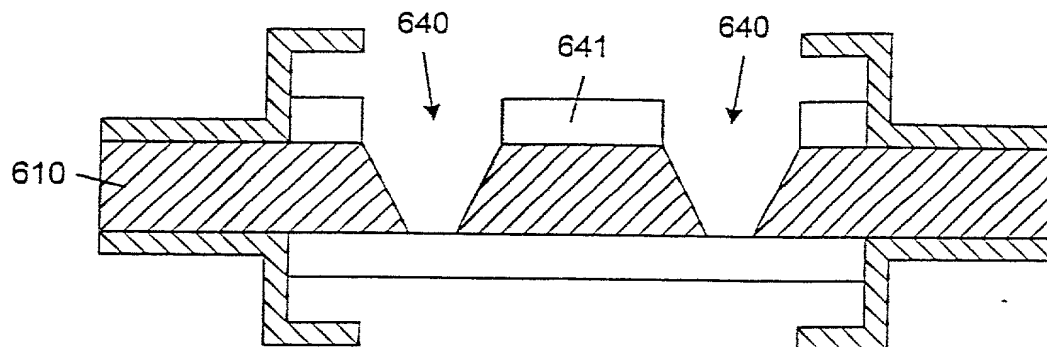


FIG. 21F

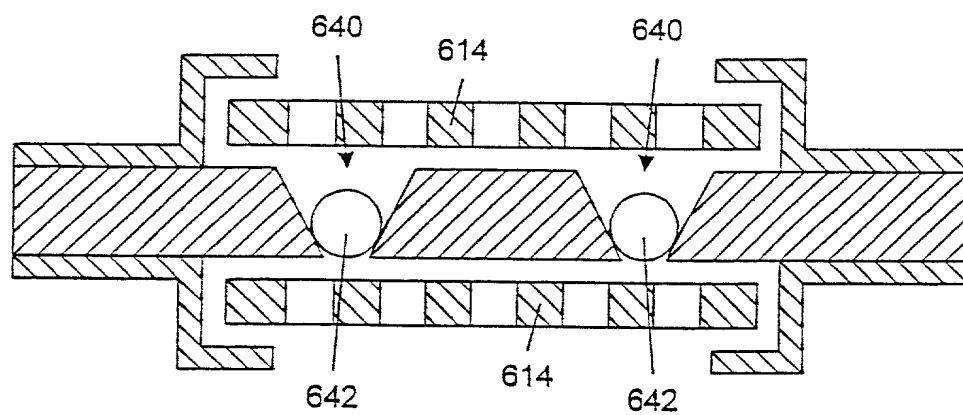
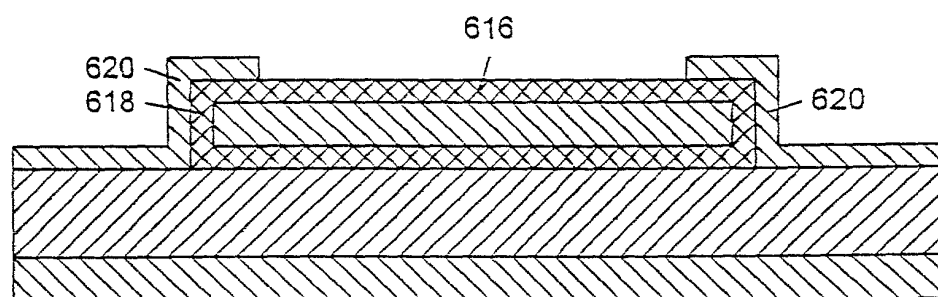
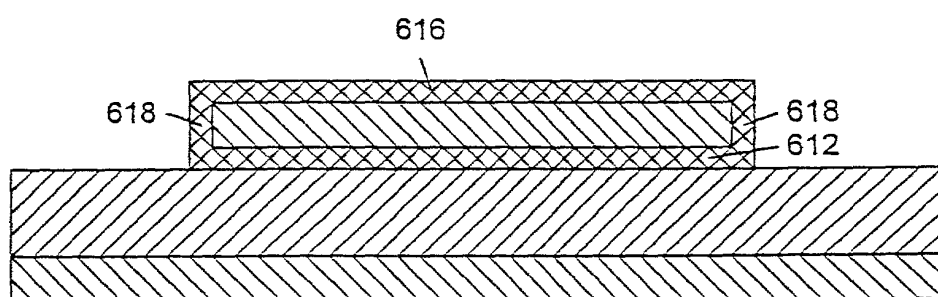
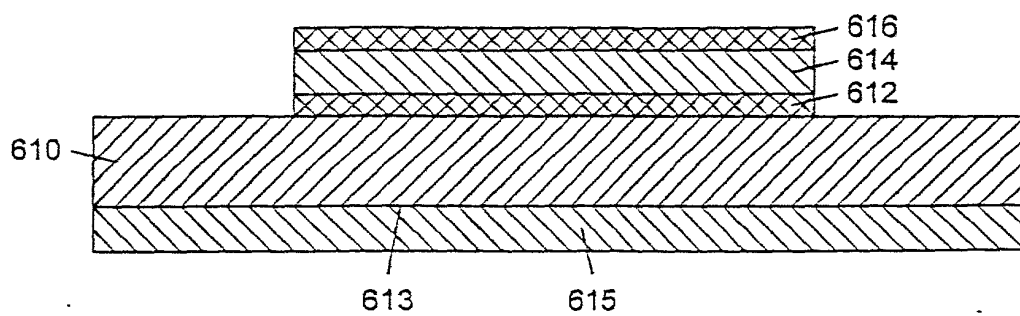


FIG. 21G



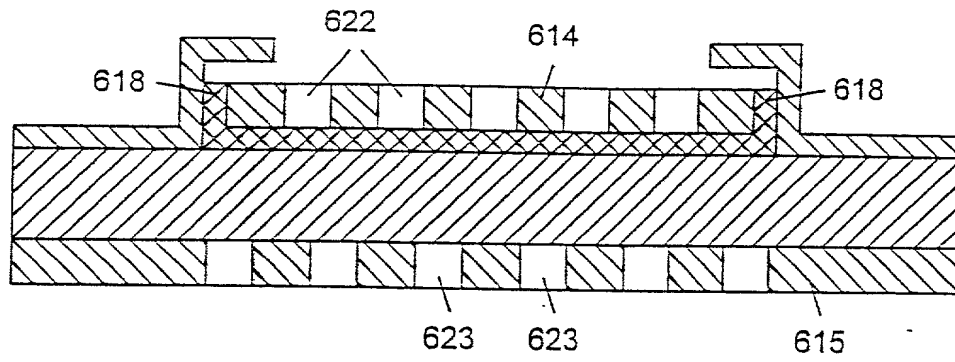


FIG. 22D

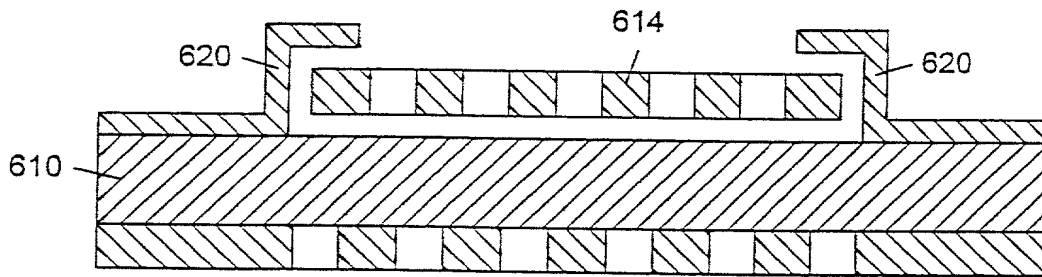


FIG. 22E

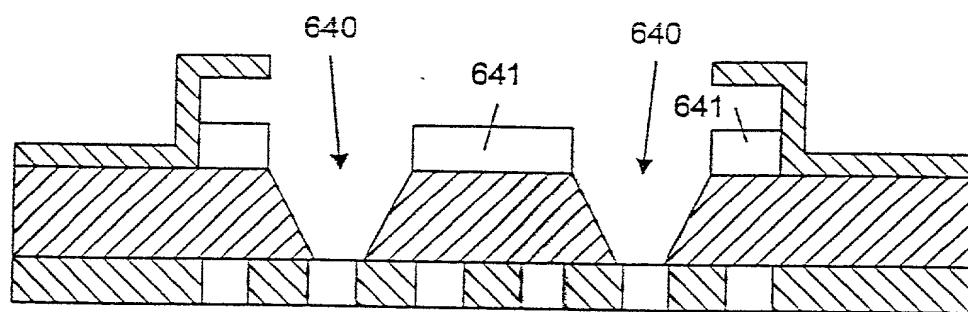


FIG. 22F

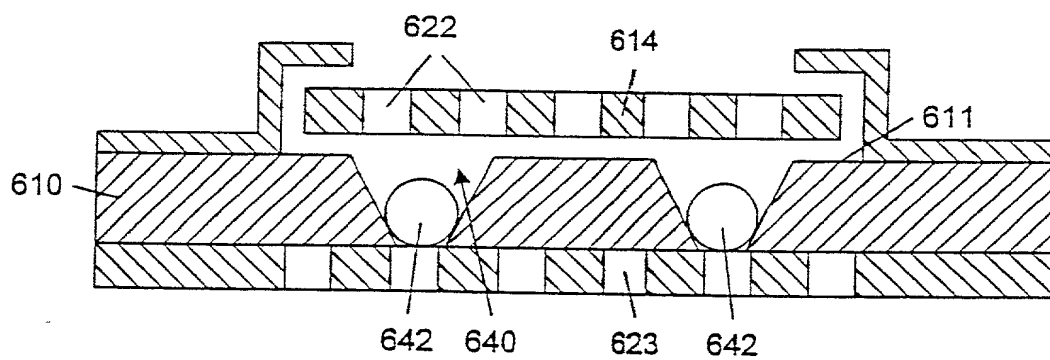


FIG. 22G

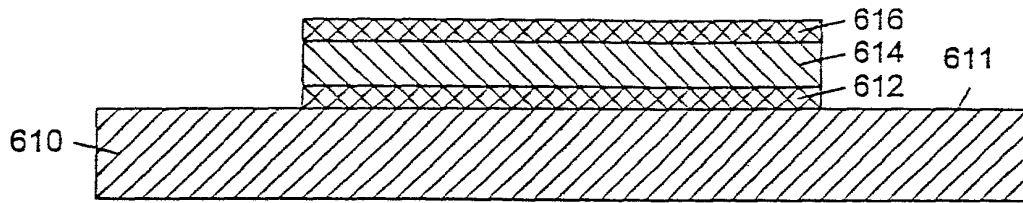


FIG. 23A

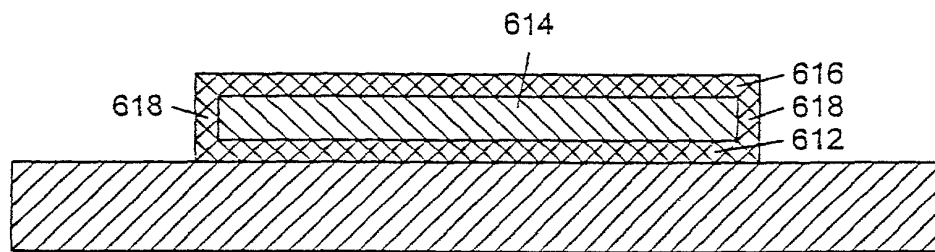


FIG. 23B

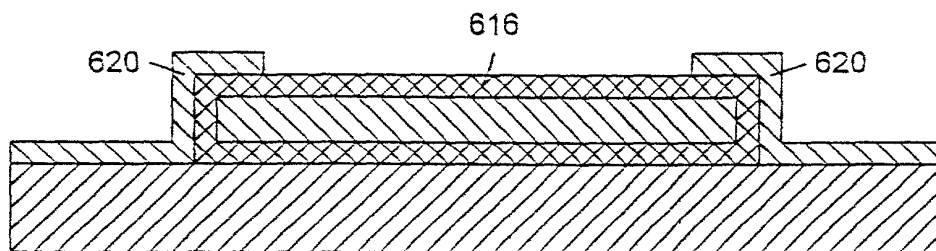


FIG. 23C

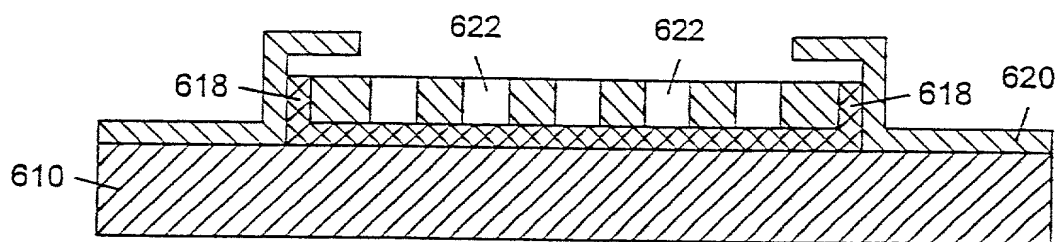


FIG. 23D

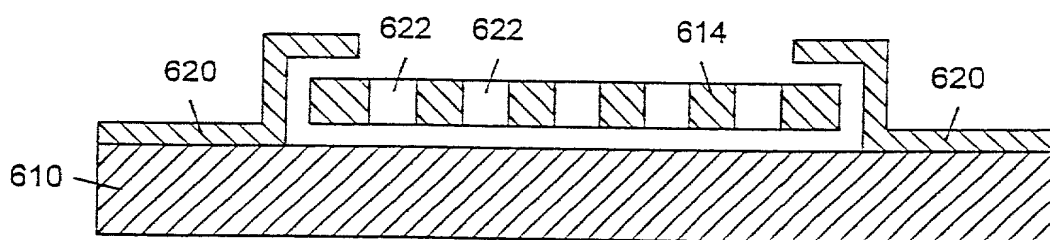


FIG. 23E

2025-09-22 09:22:00

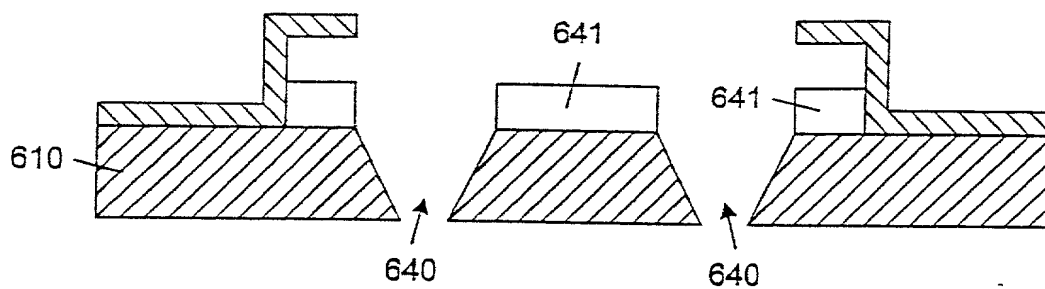


FIG. 23F

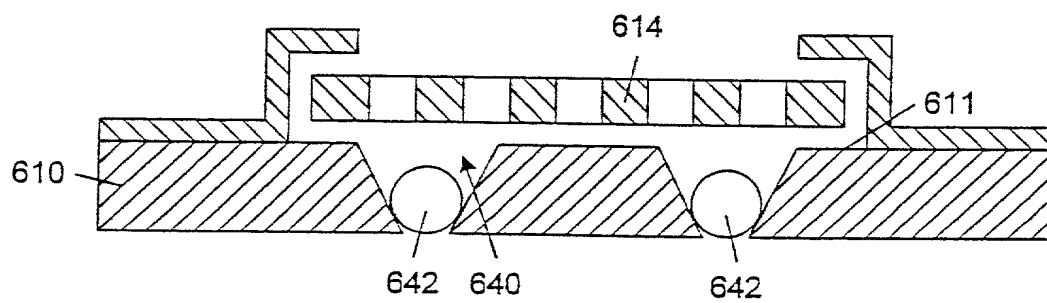


FIG. 23G

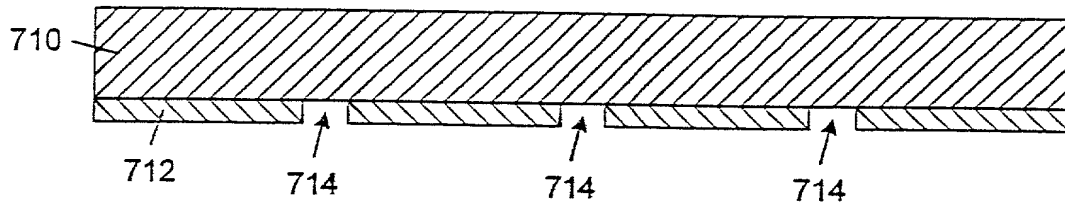


FIG. 24A

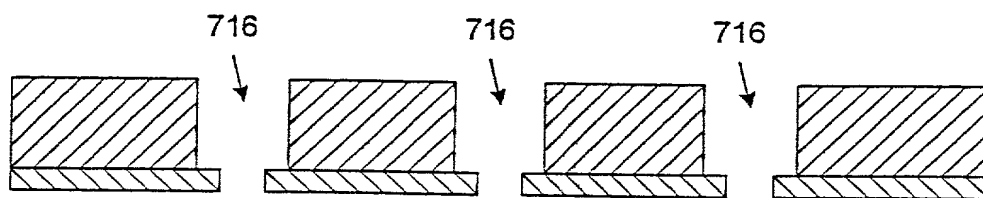


FIG. 24B

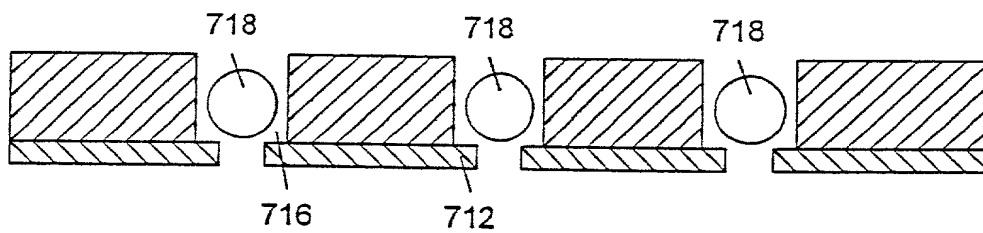


FIG. 24C

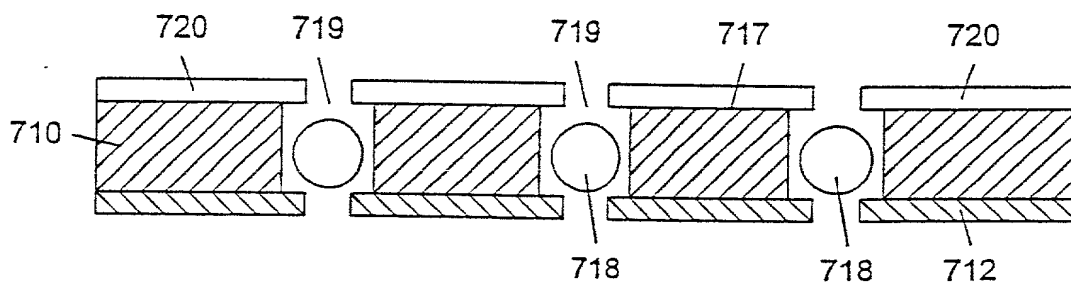


FIG. 24D

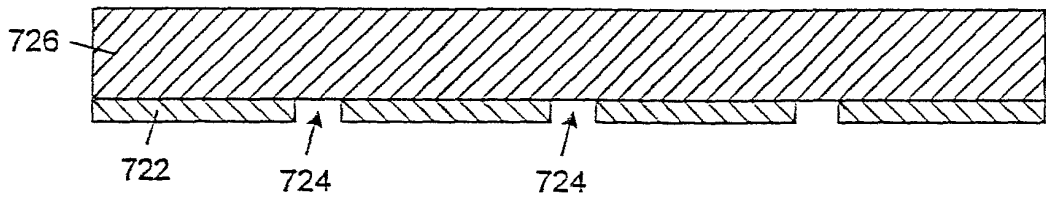


FIG. 25A

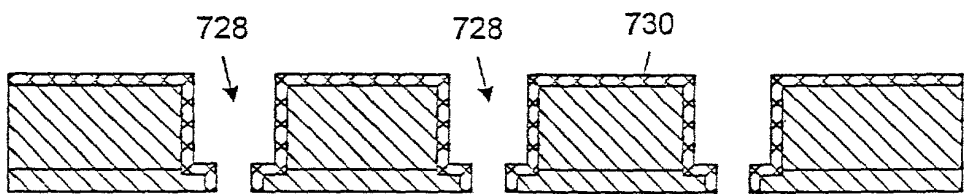


FIG. 25B

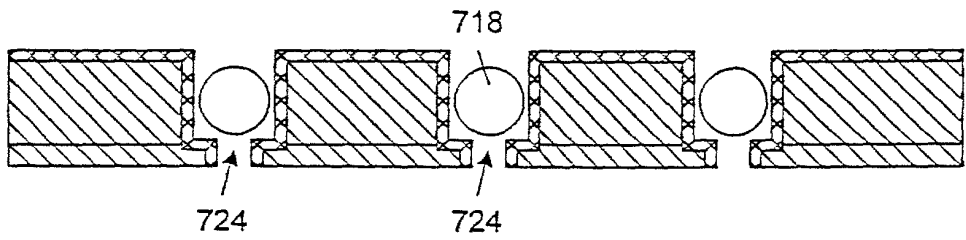


FIG. 25C

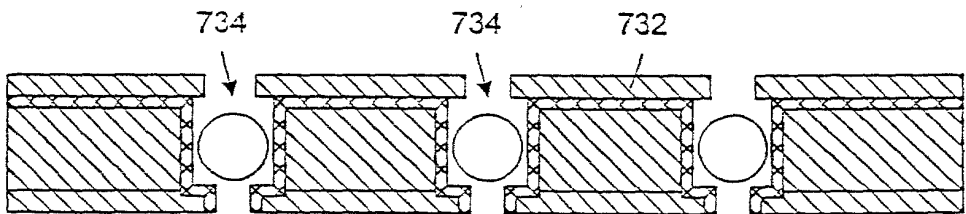


FIG. 25D

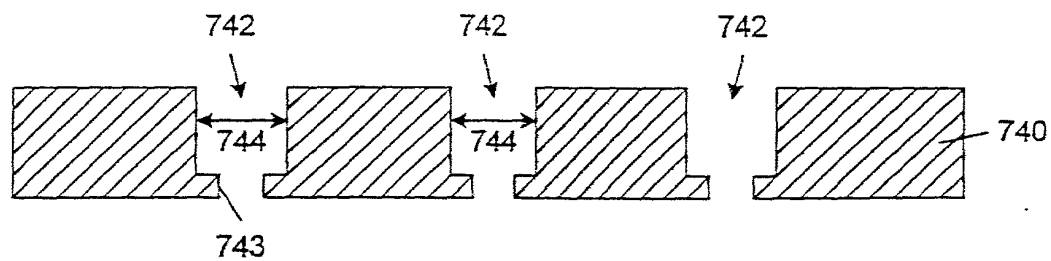


FIG. 26A

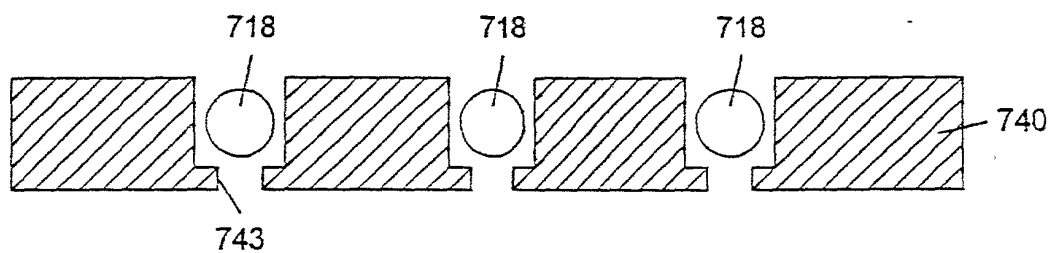


FIG. 26B

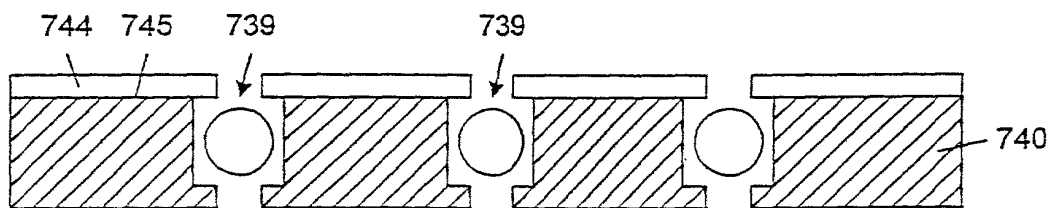


FIG. 26C

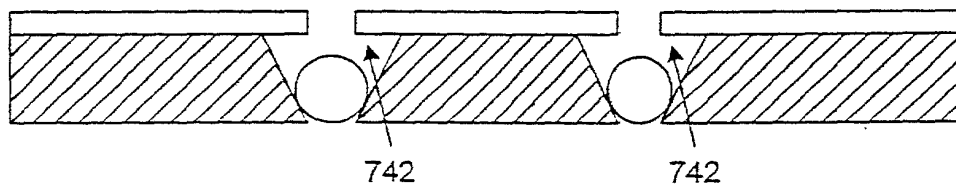


FIG. 26D

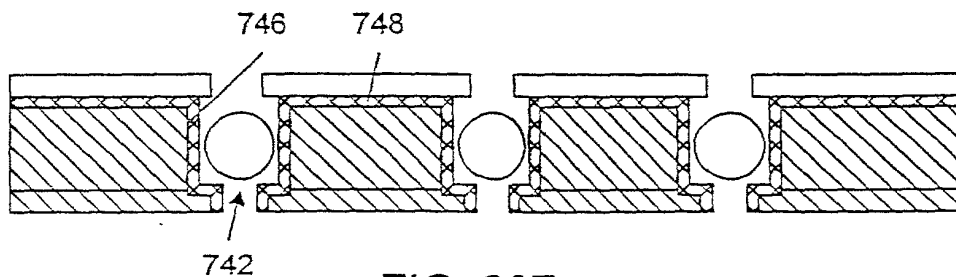


FIG. 26E

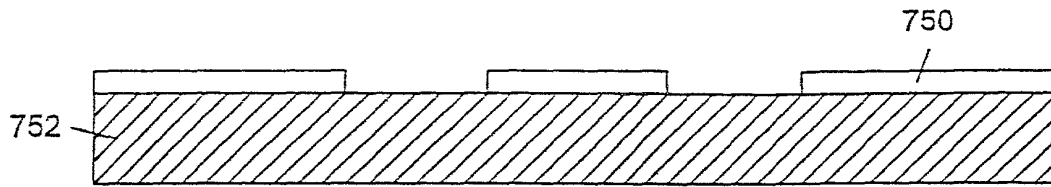


FIG. 27A

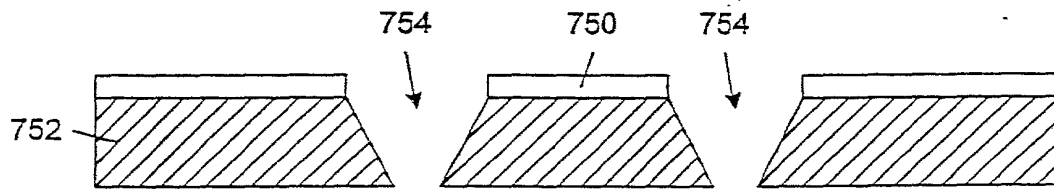


FIG. 27B

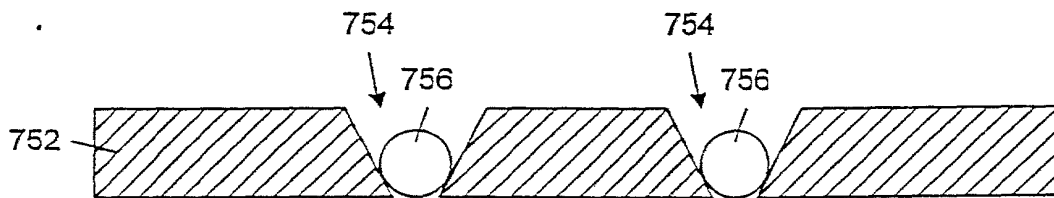


FIG. 27C

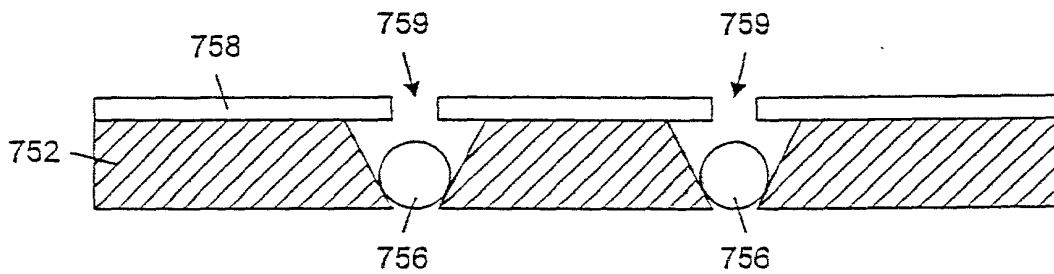


FIG. 27D



FIG. 28A

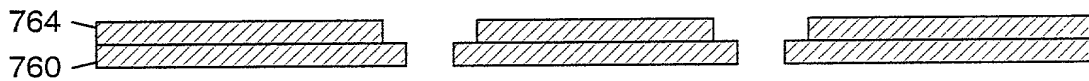


FIG. 28B

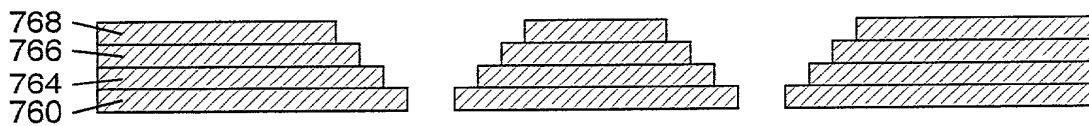


FIG. 28C

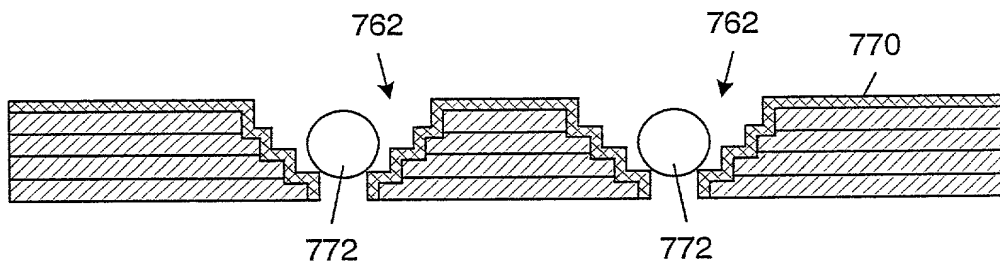


FIG. 28D

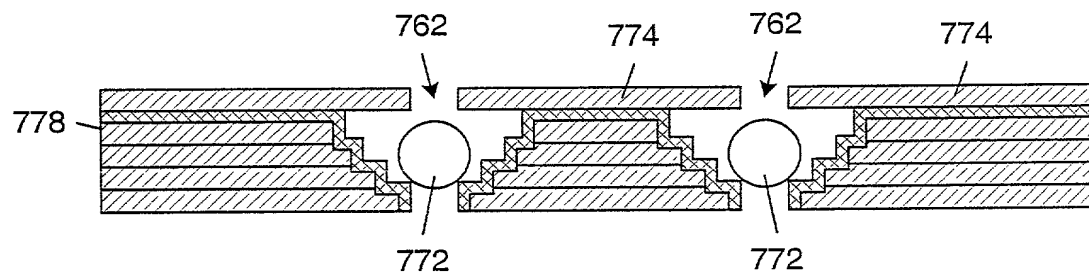


FIG. 28E

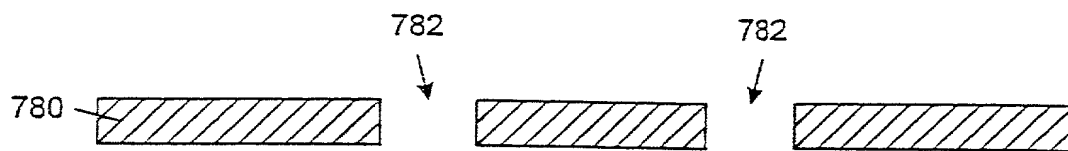


FIG. 29A

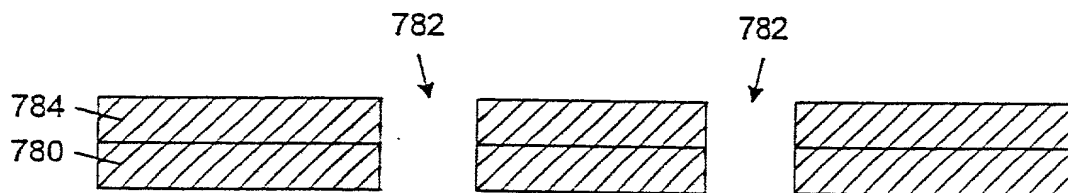


FIG. 29B

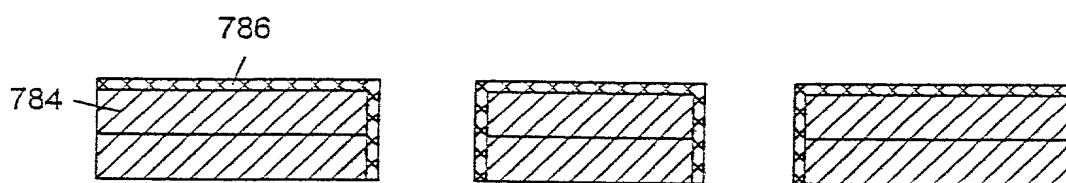


FIG. 29C

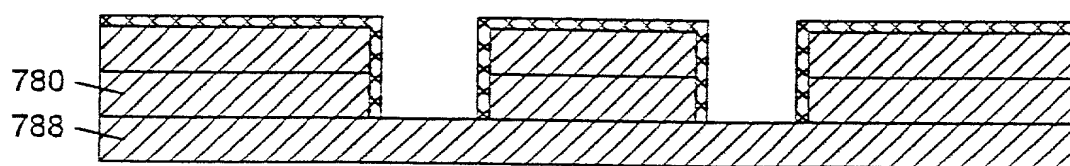


FIG. 29D

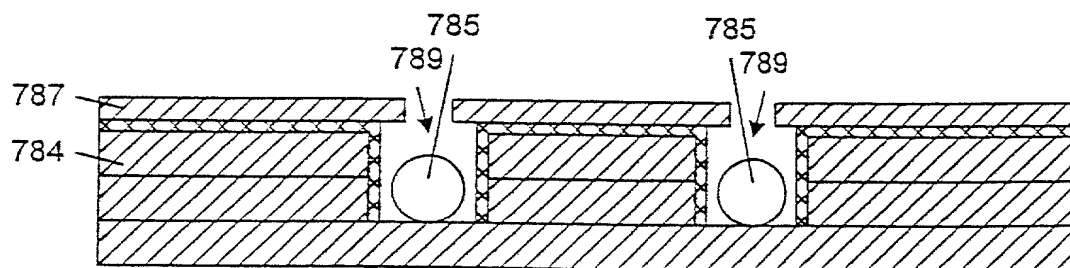


FIG. 29E

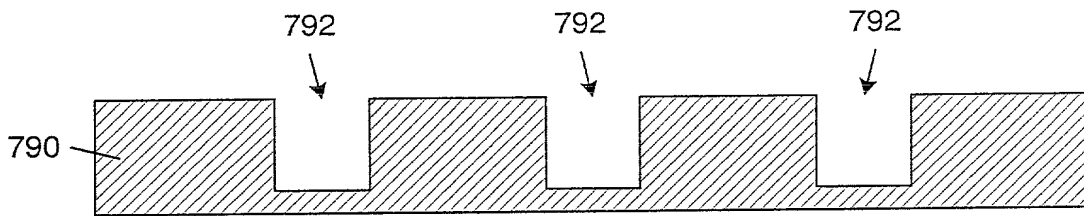


FIG. 30A

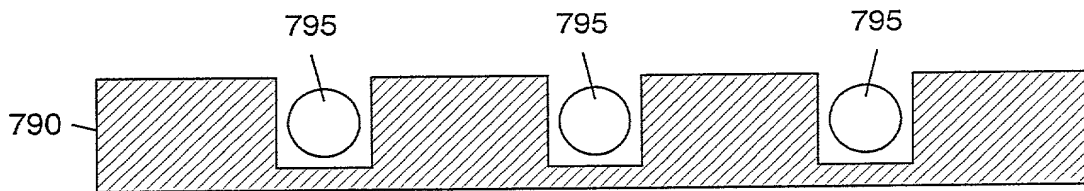


FIG. 30B

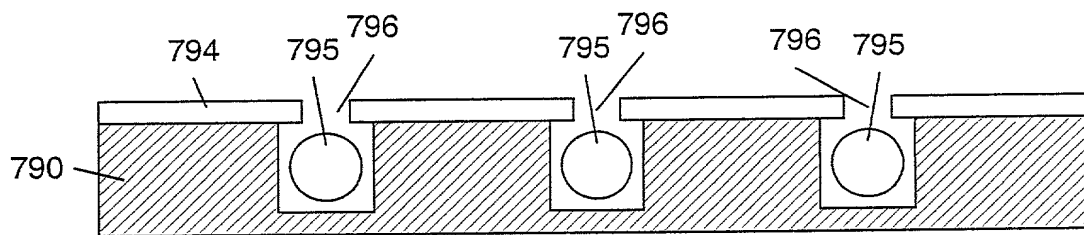


FIG. 30C

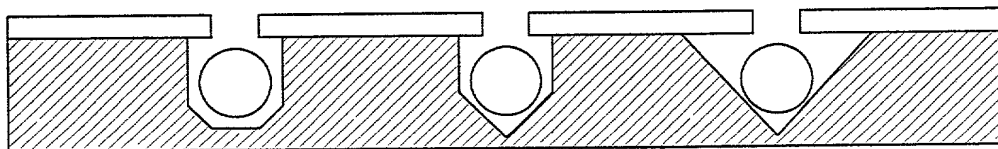


FIG. 30D

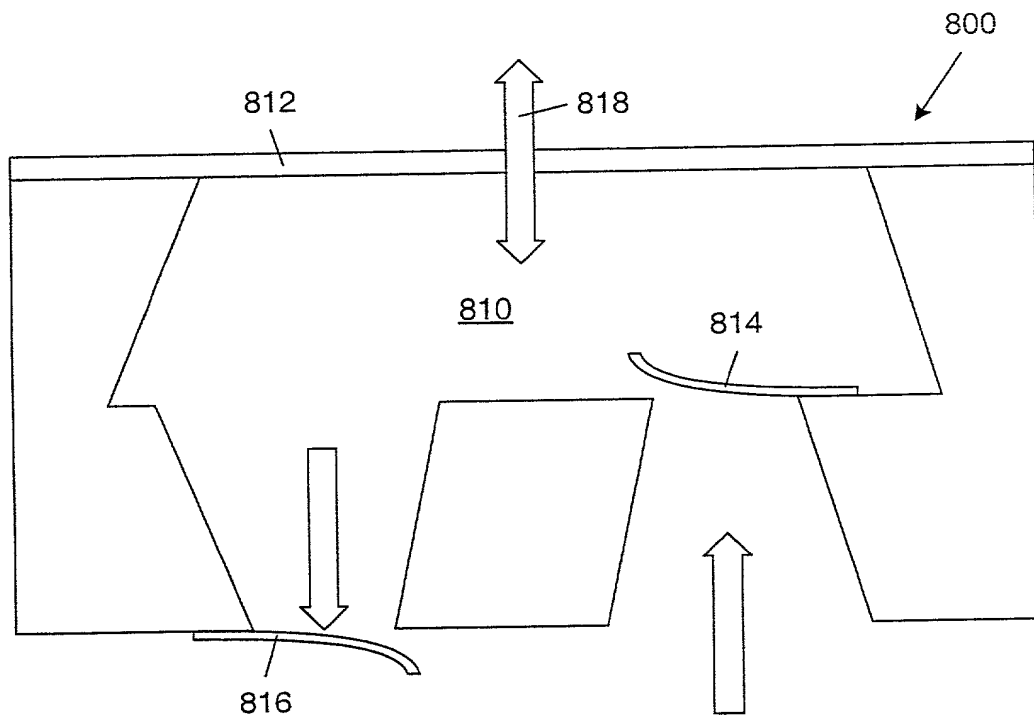


FIG. 31

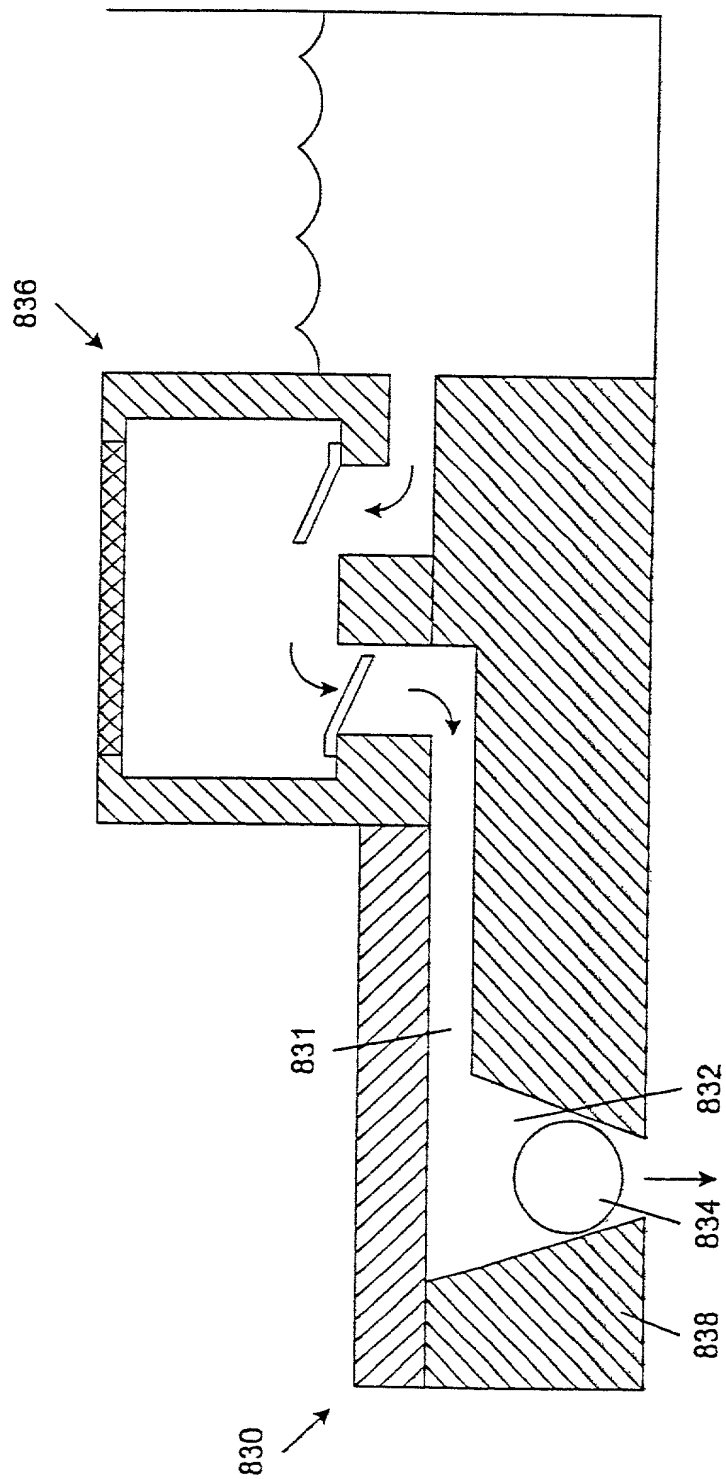


FIG. 33

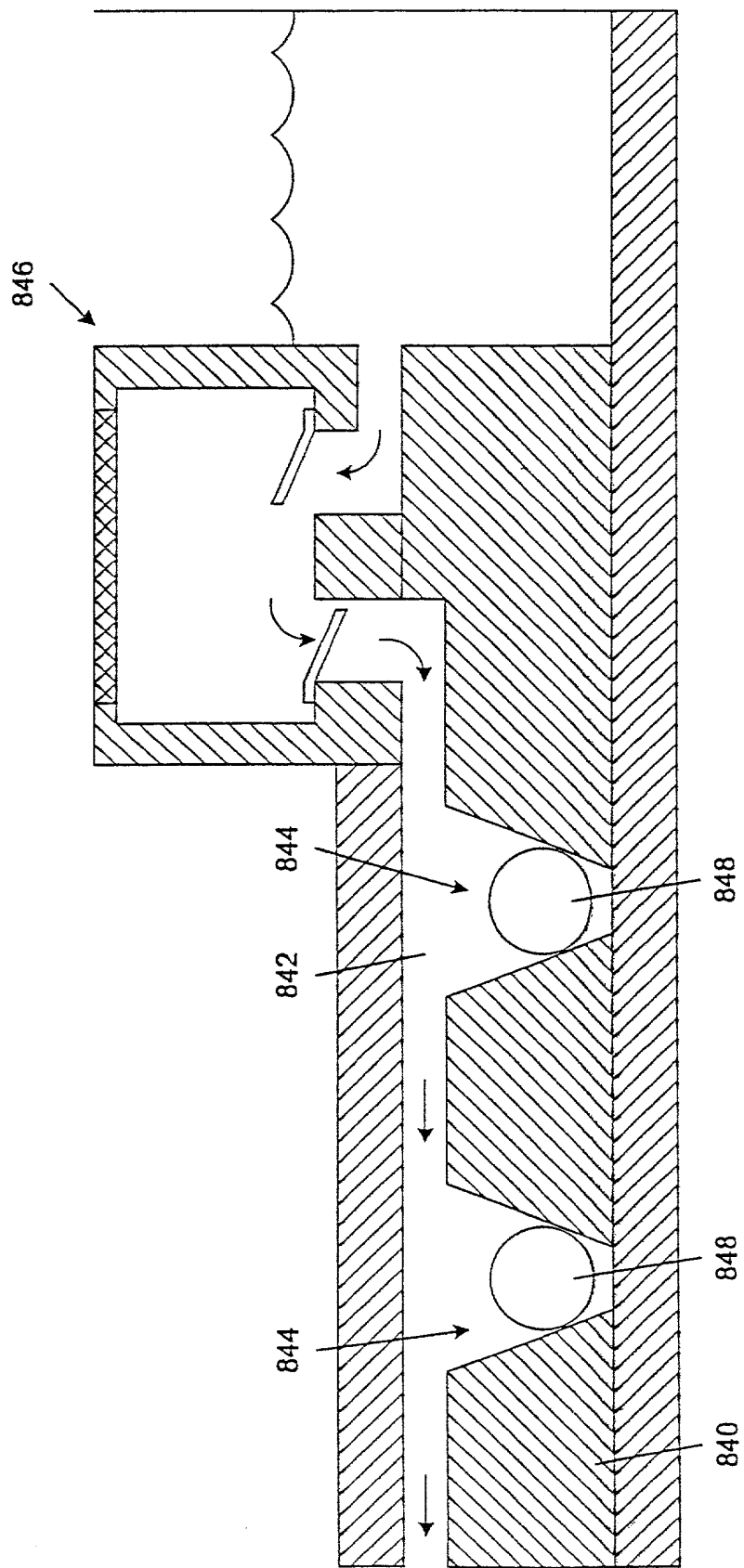


FIG. 34

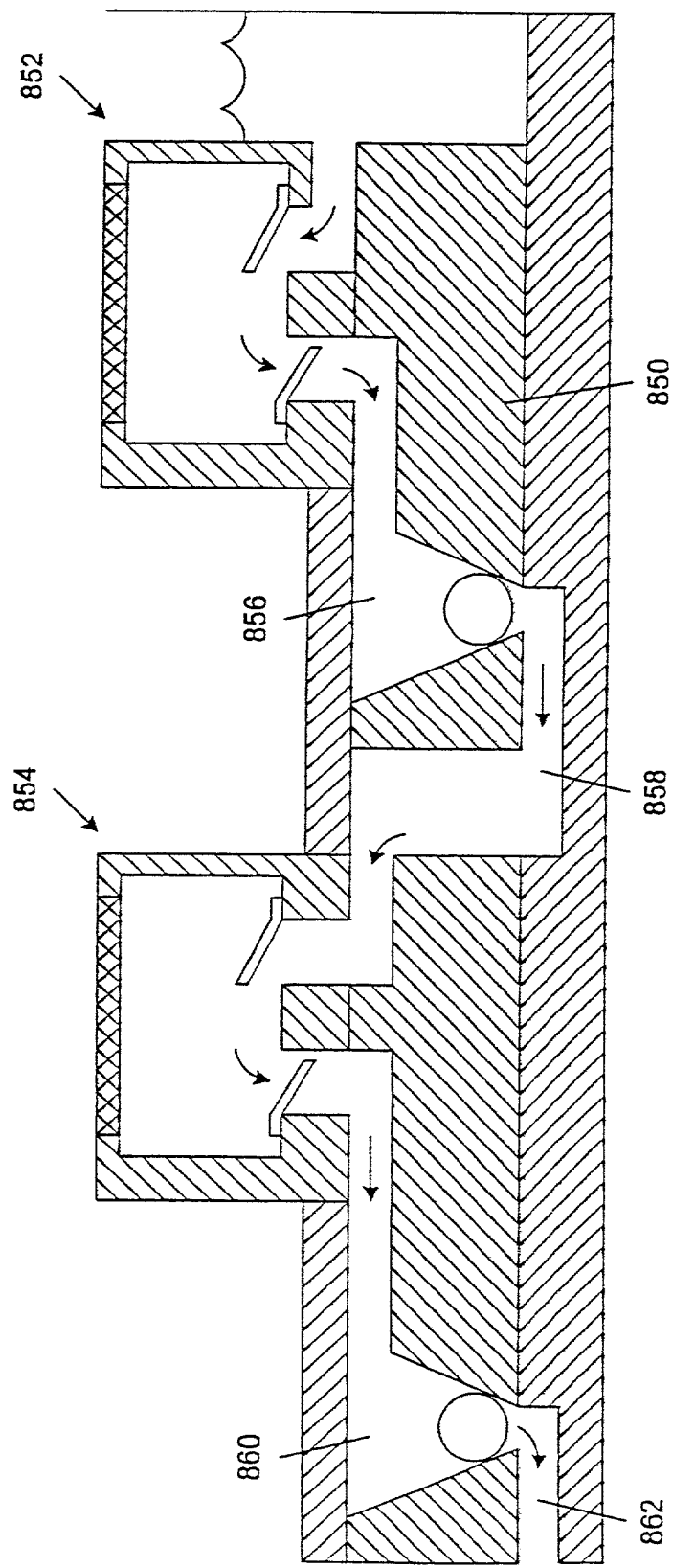


FIG. 35

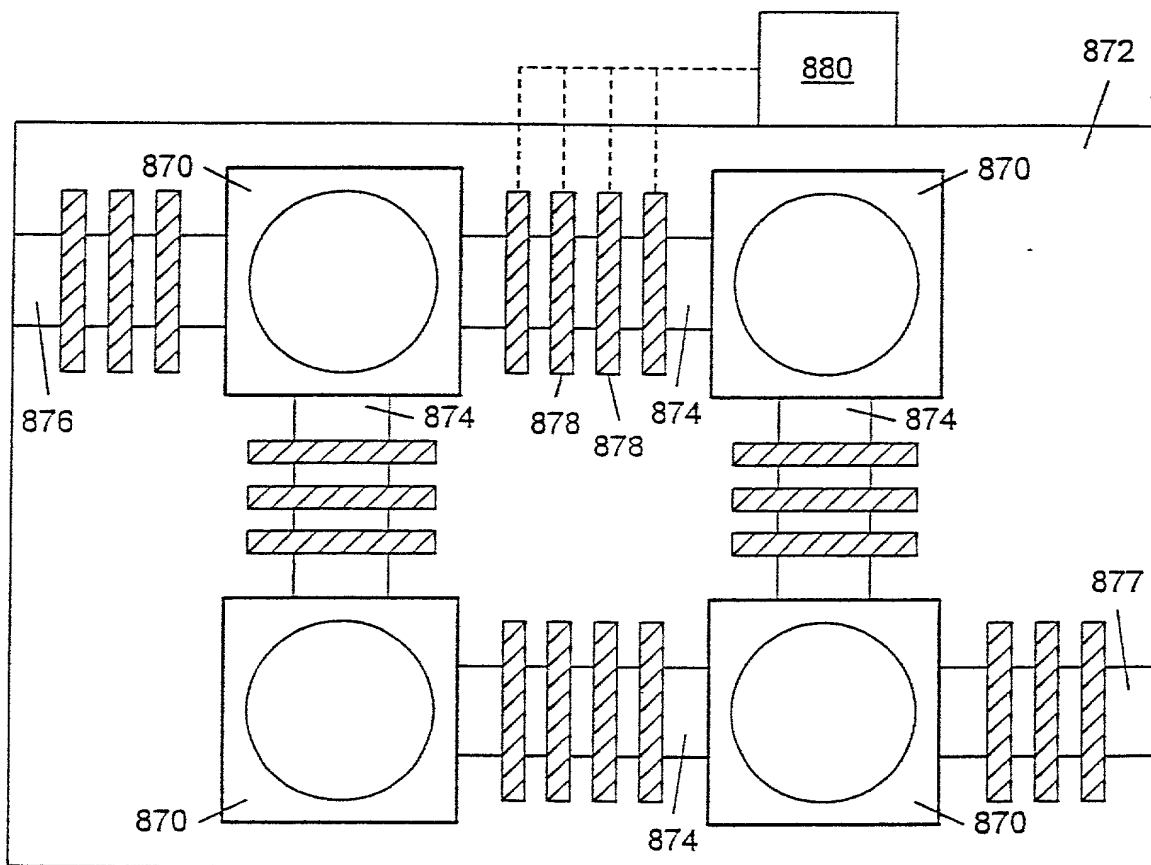


FIG. 36

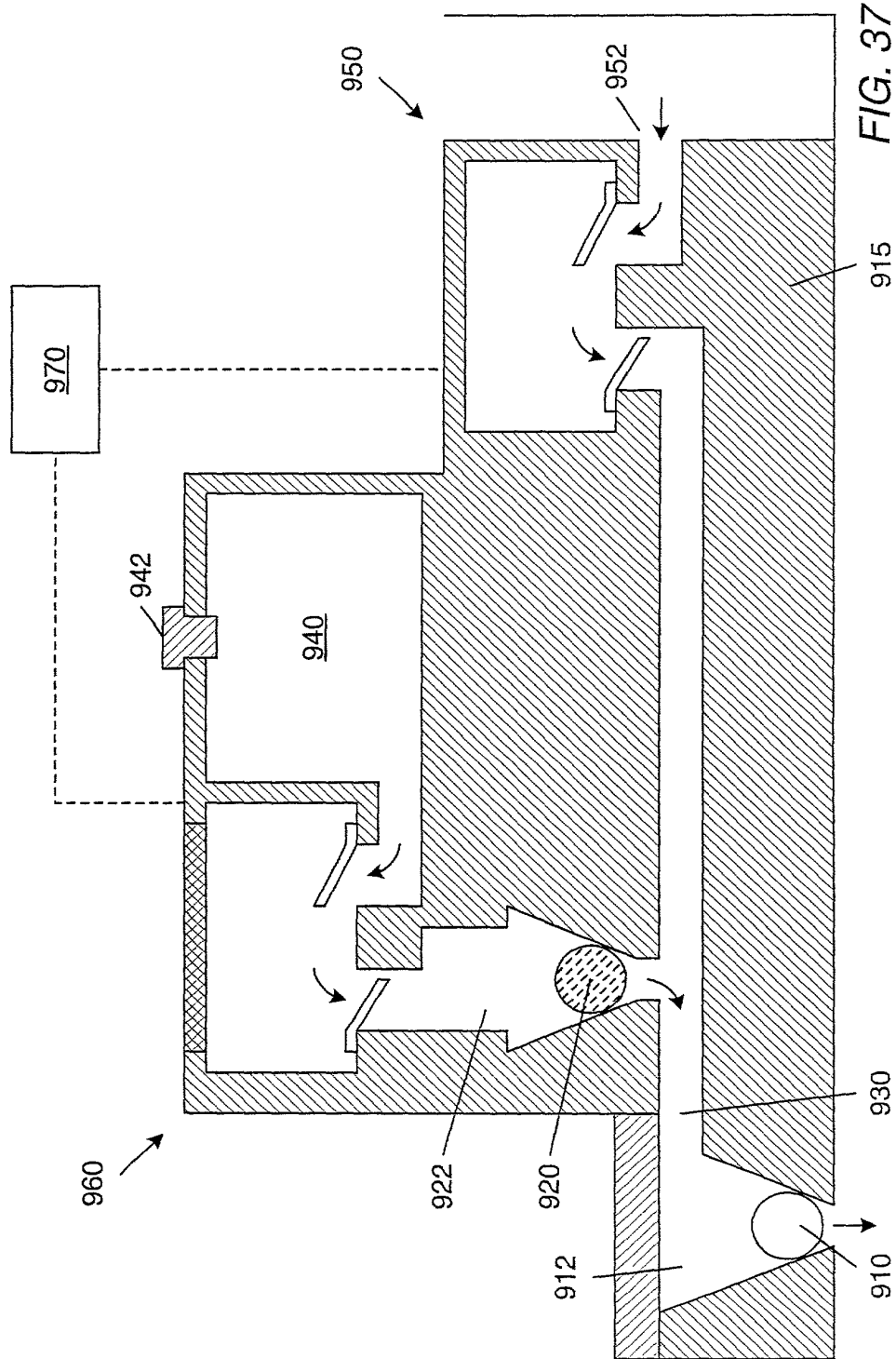


FIG. 37

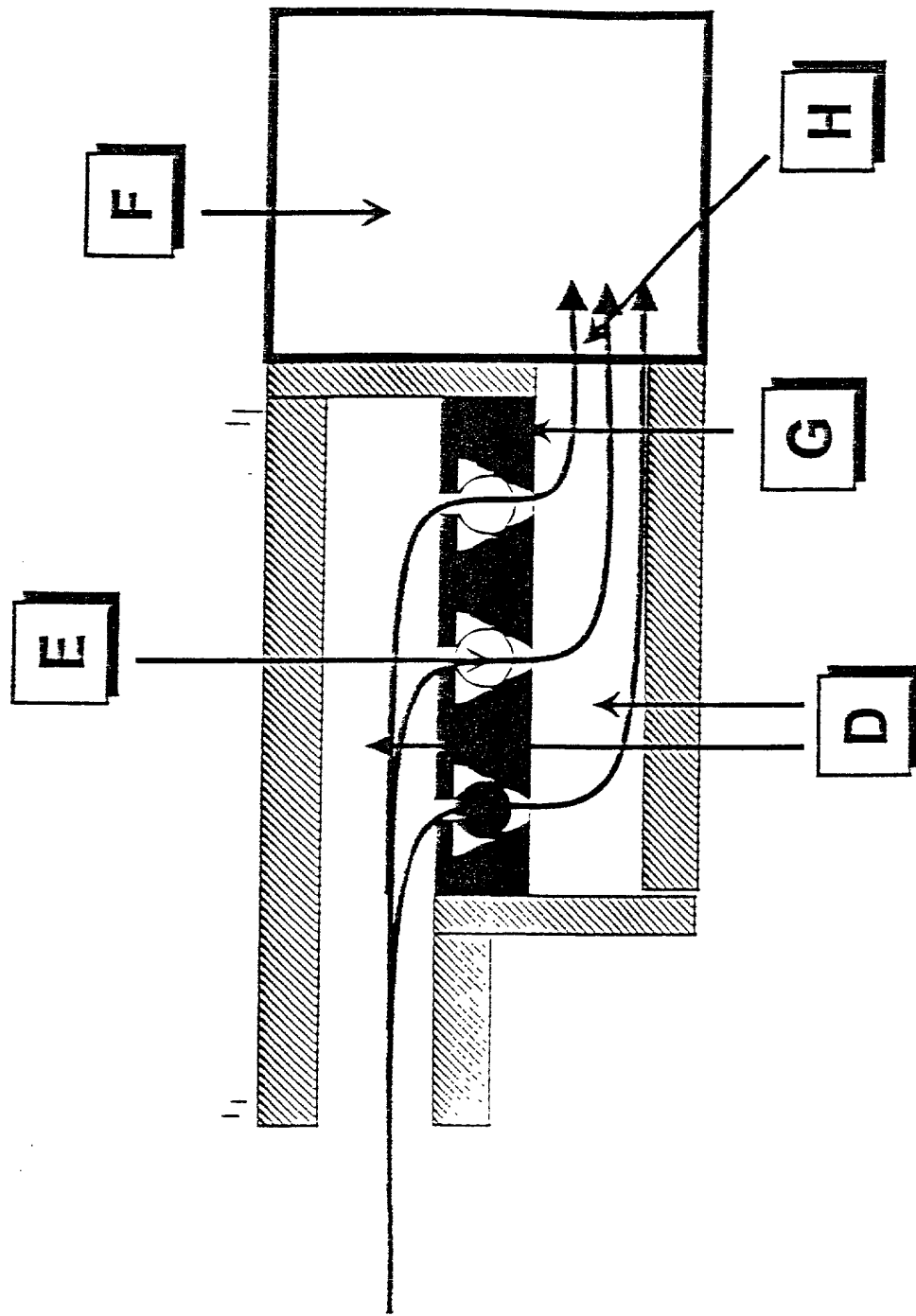


Figure 38

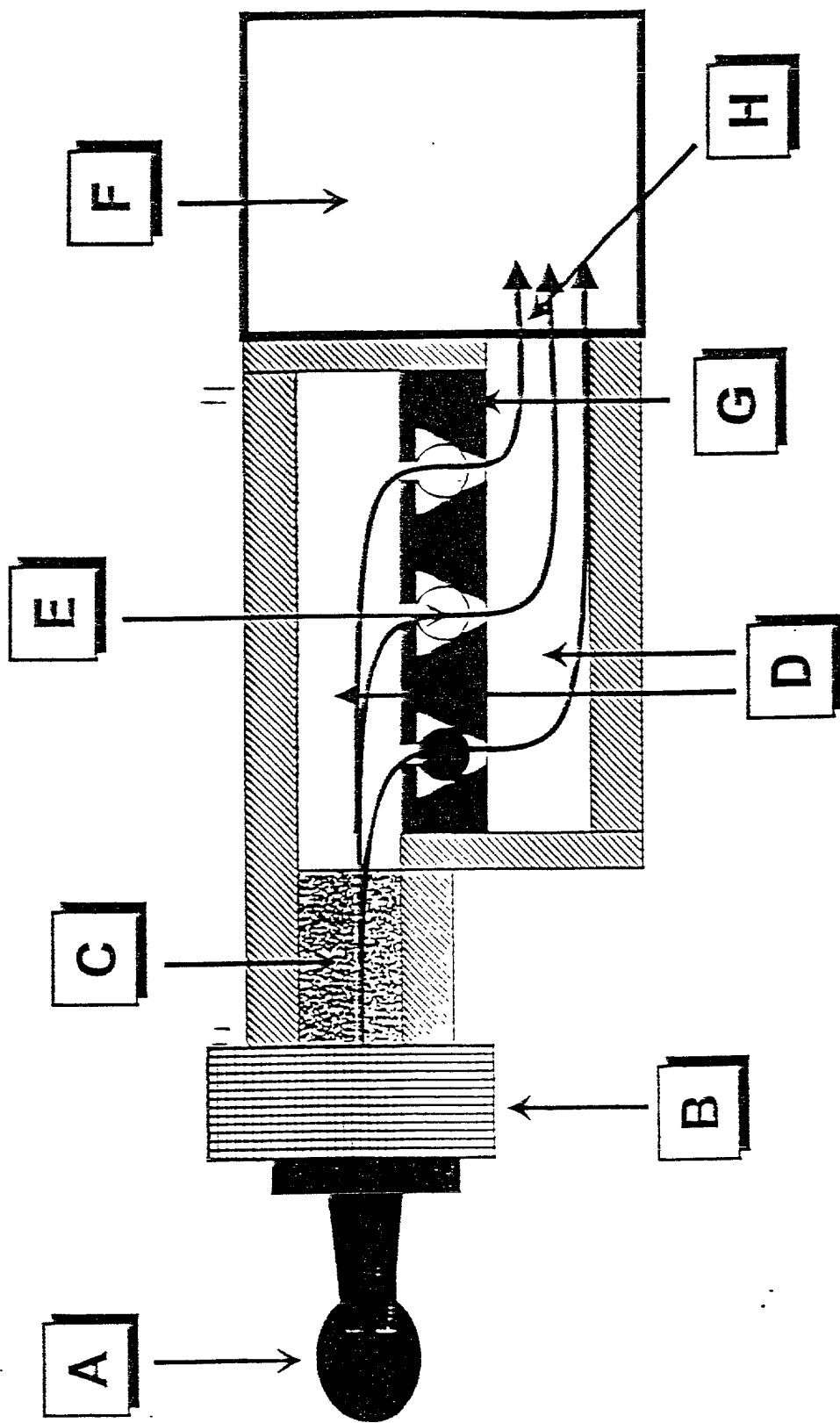


Figure 39

2002-08-22

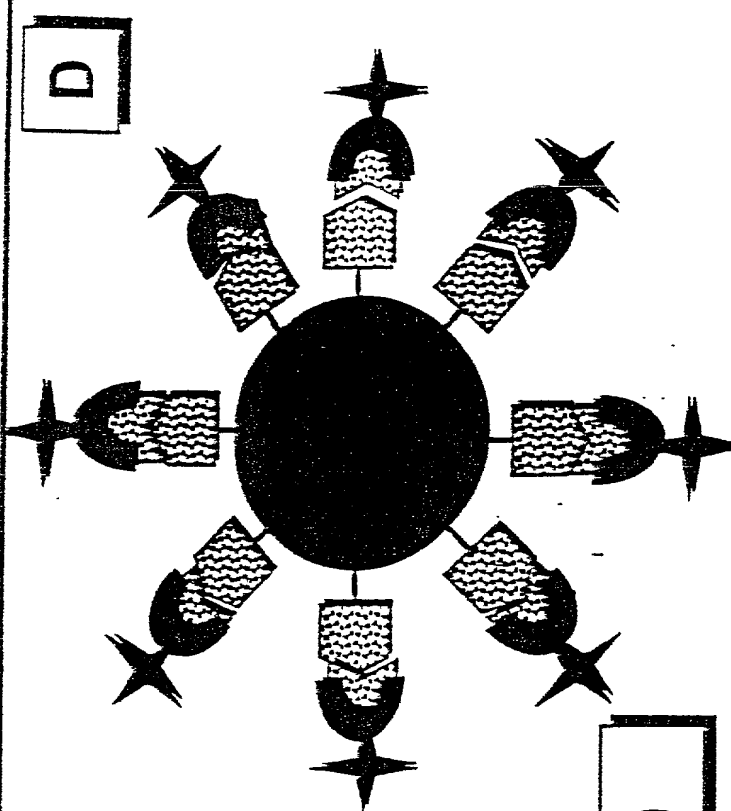
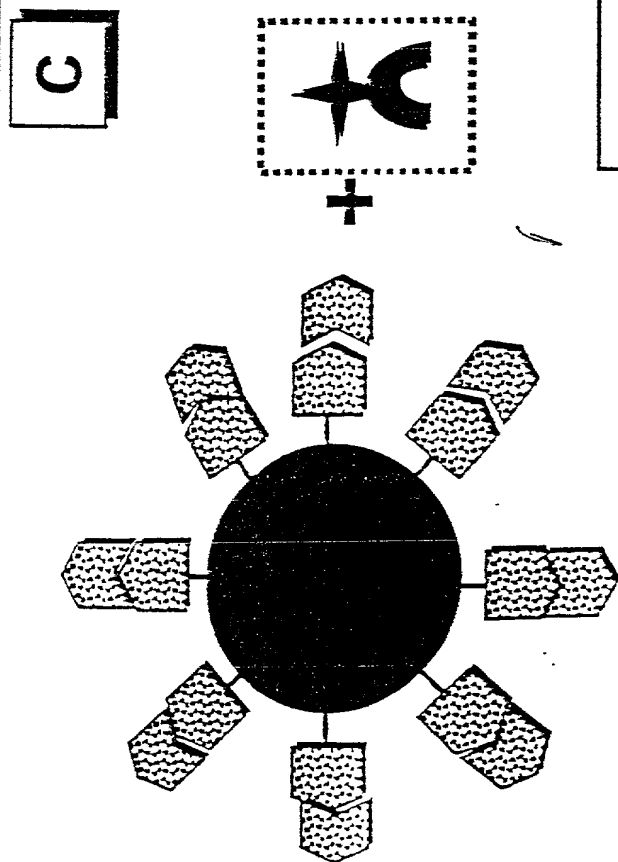
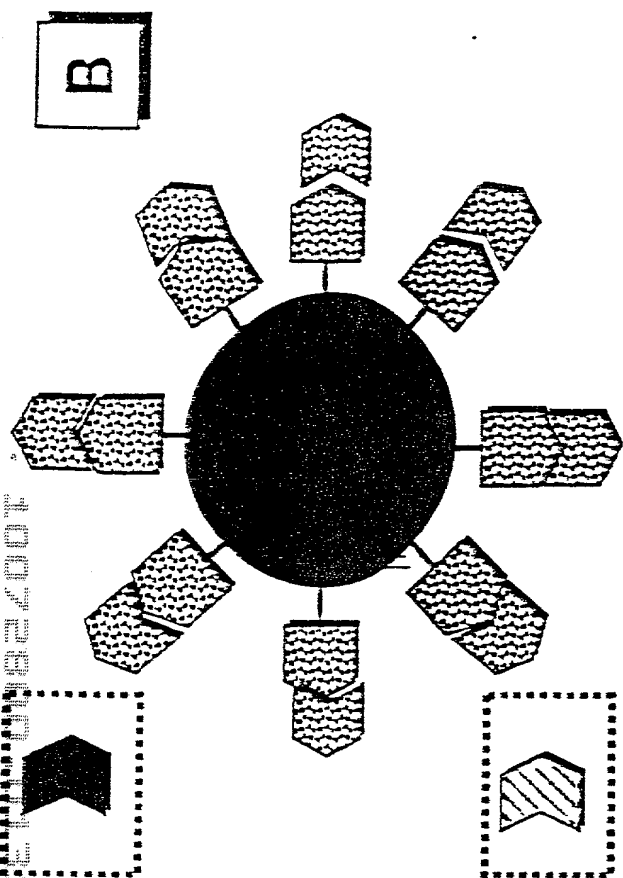
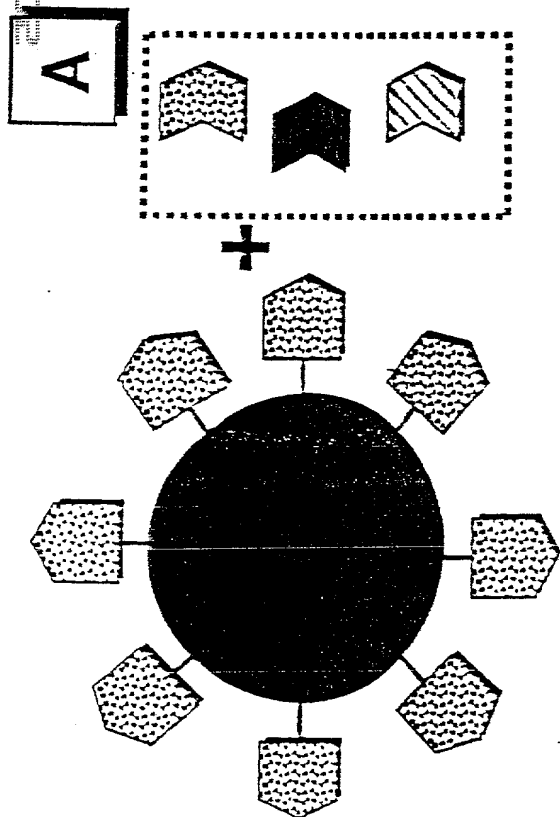
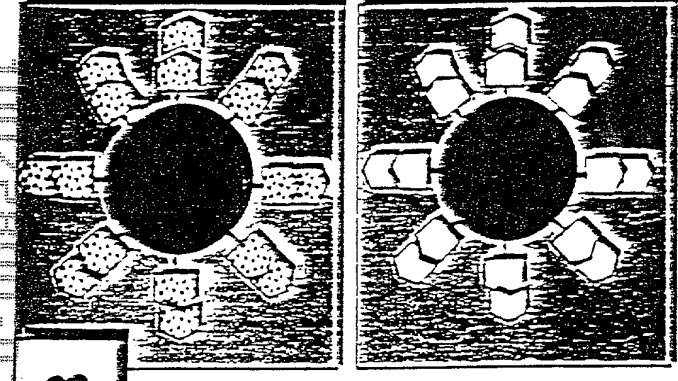
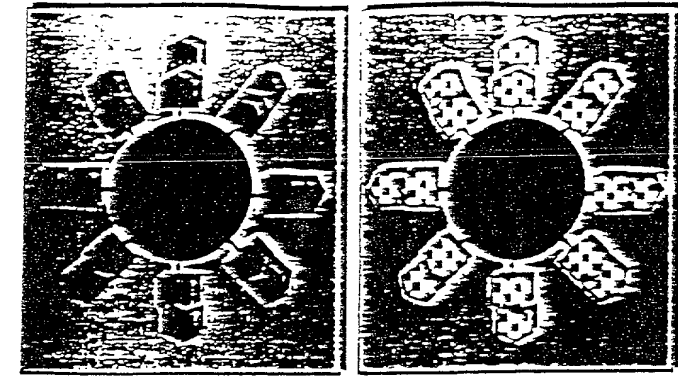
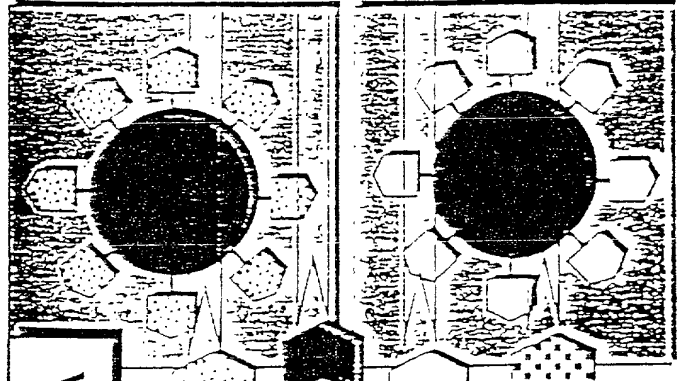
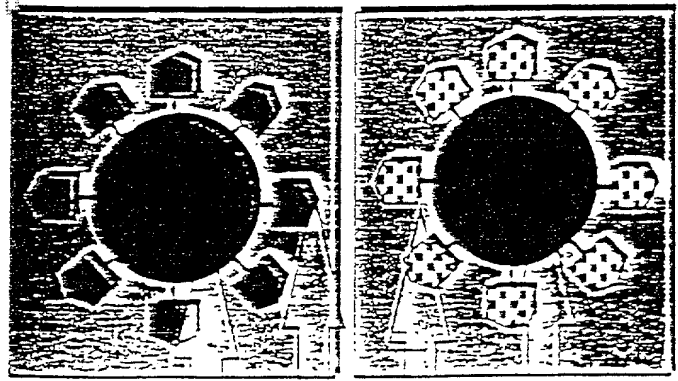


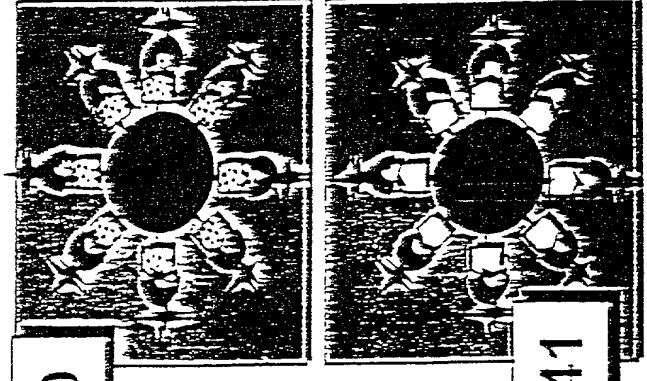
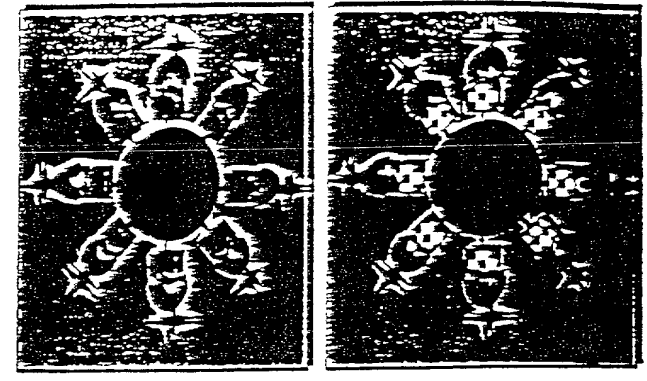
FIG. 40



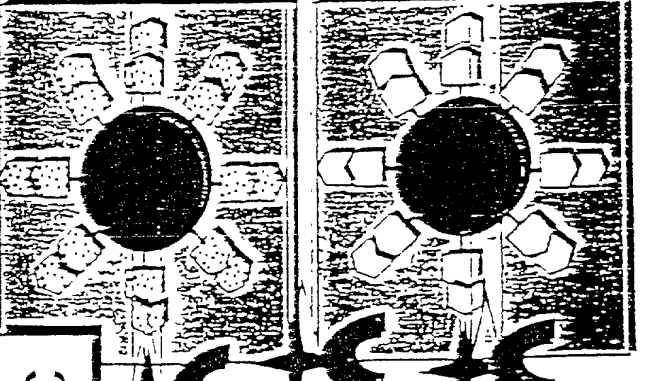
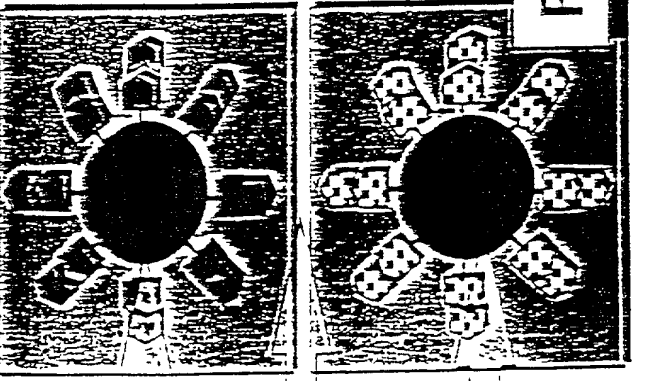
B



A



D



C

FIG. 41



Electronic Tongue Biological Sample Acquisition

Prototype 6/2/99

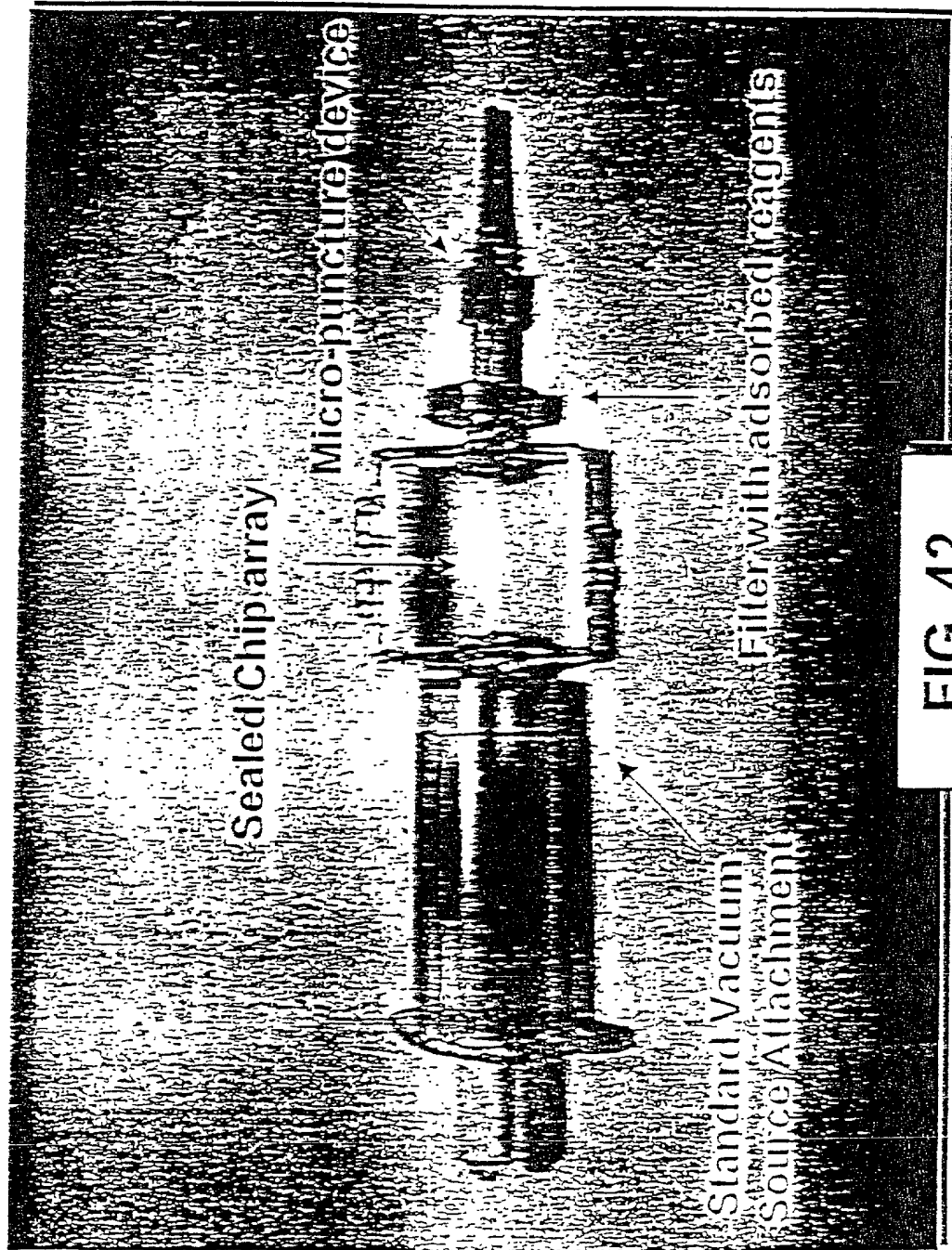


FIG. 42

D

Forward Flow Direction

A

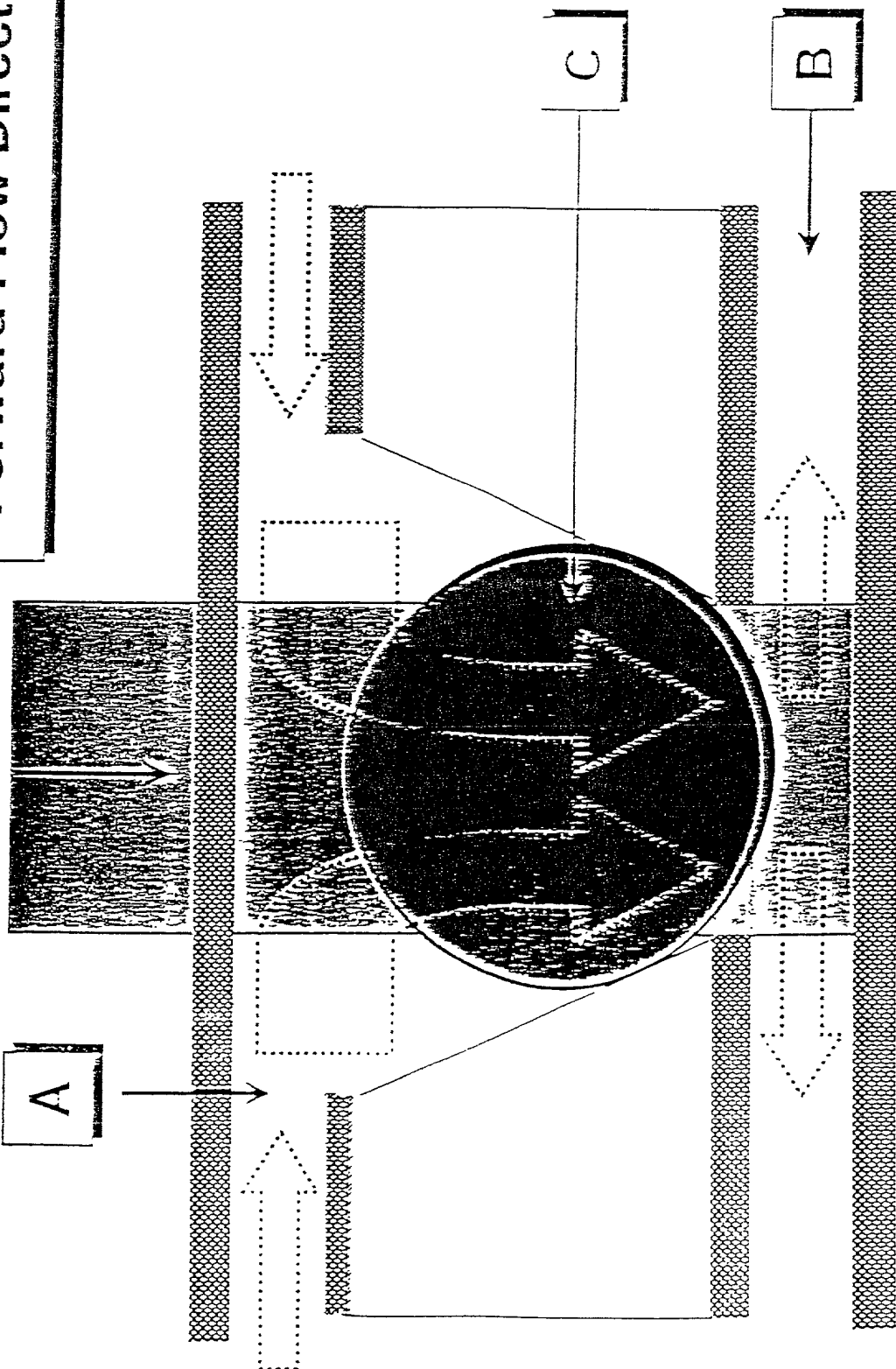


FIG. 43

Reverse Flow Direction

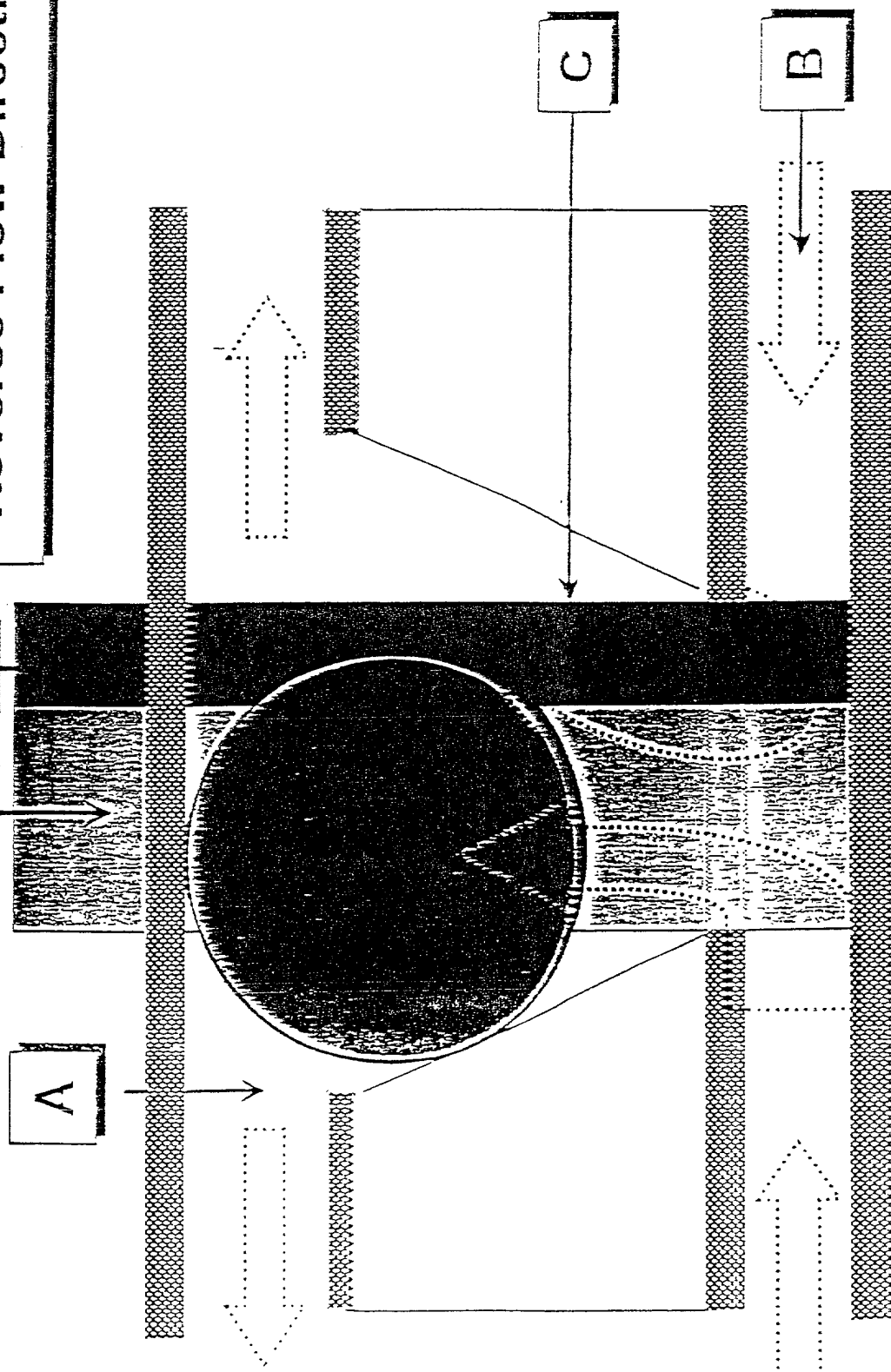


FIG. 44

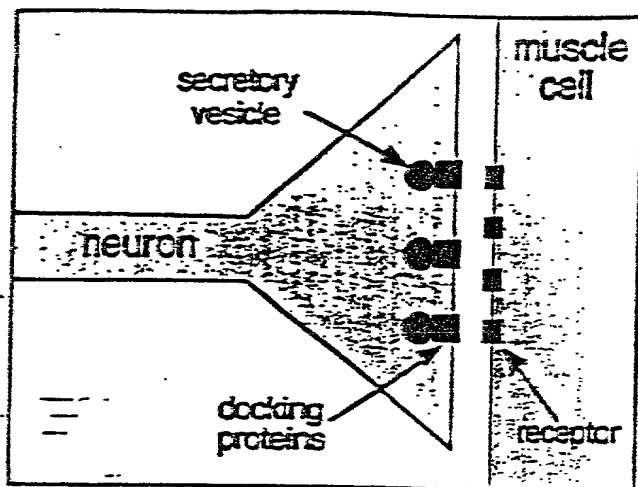


Fig. 45-A

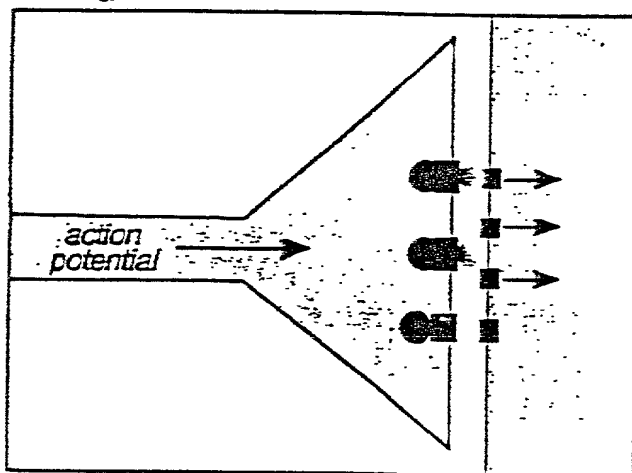


Fig. 45-B

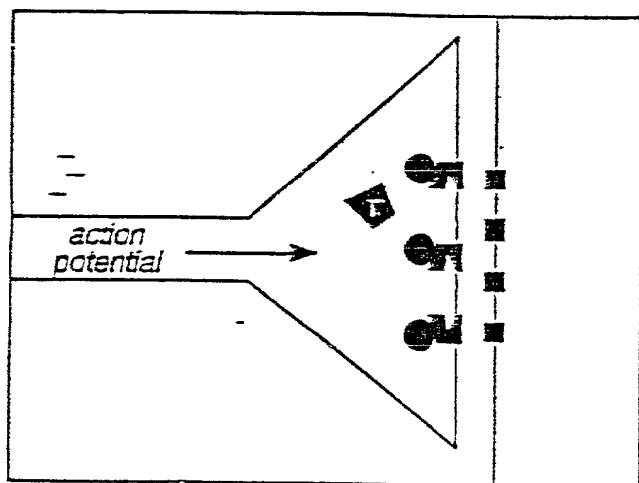


Fig. 45-C

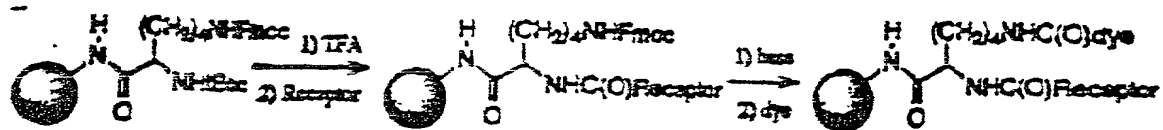


FIG. 45 D

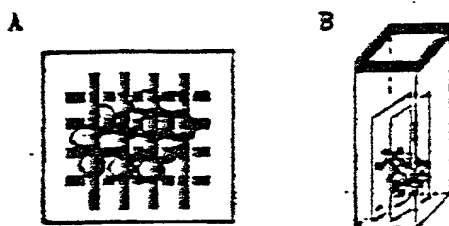


FIG. 46

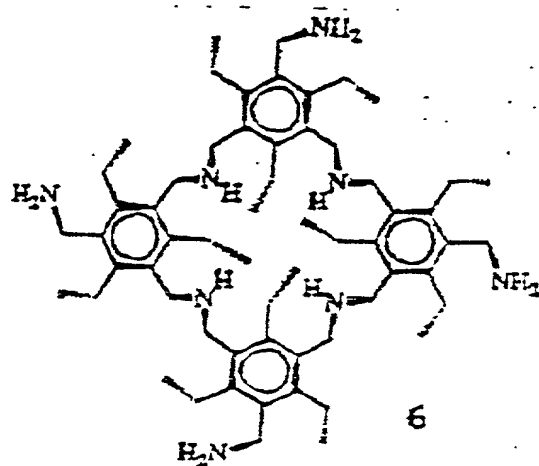
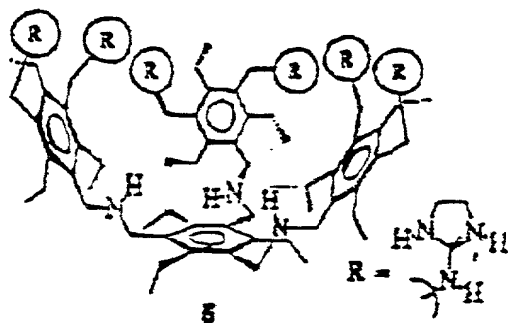
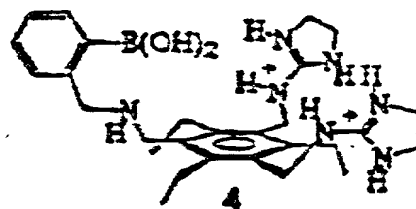
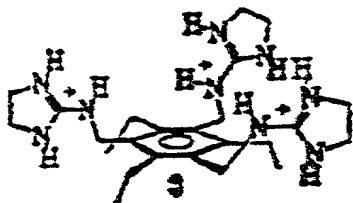


FIG. 47

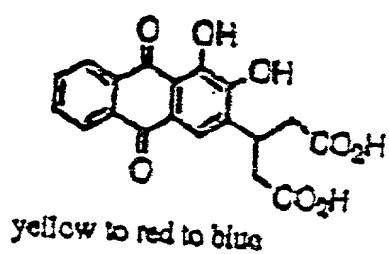
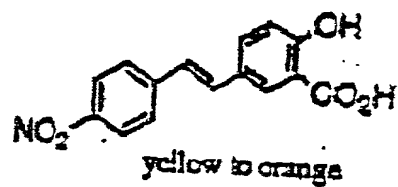
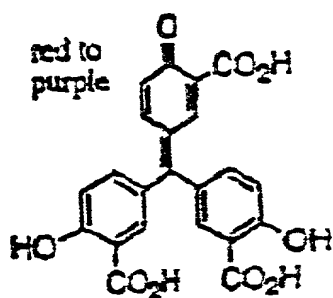
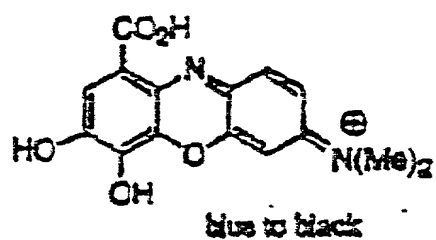
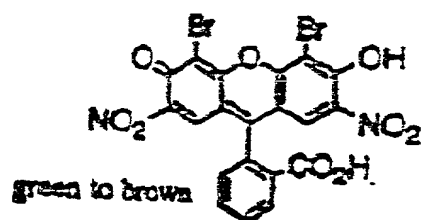


FIG. 48

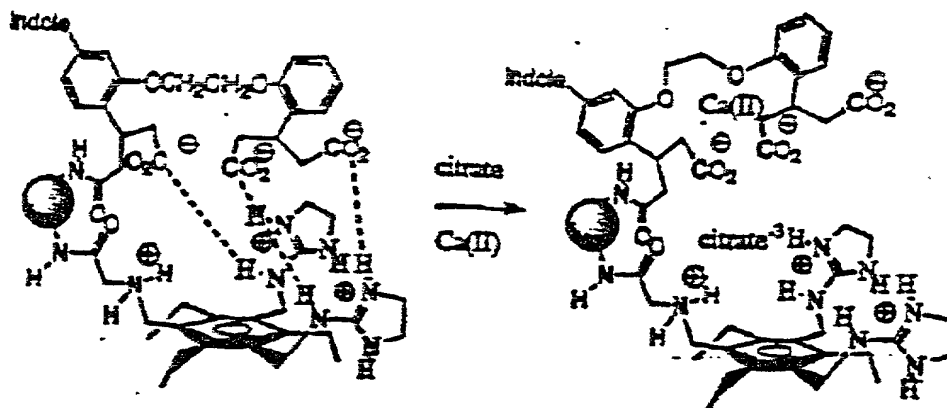


FIG. 51

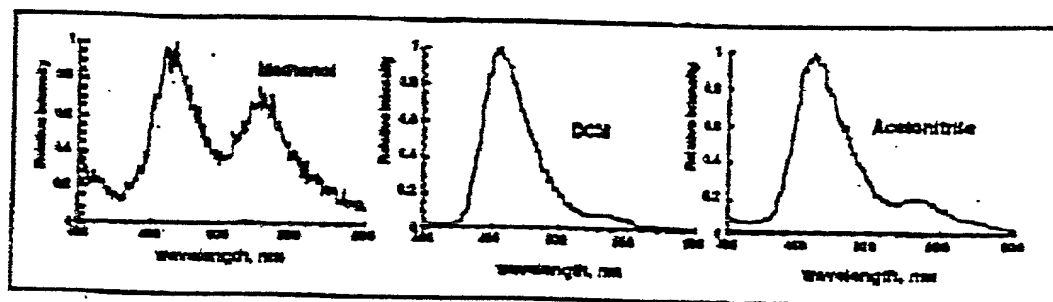


FIG. 52

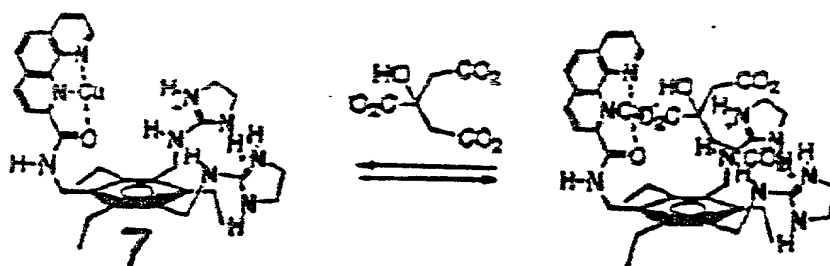


FIG. 53

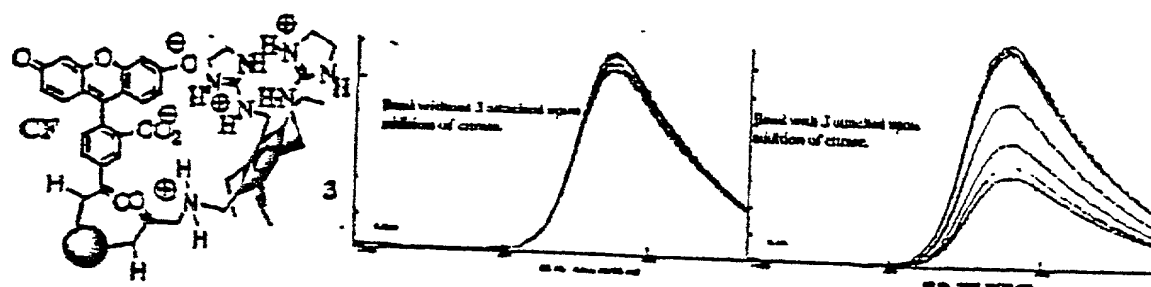


FIG. 54

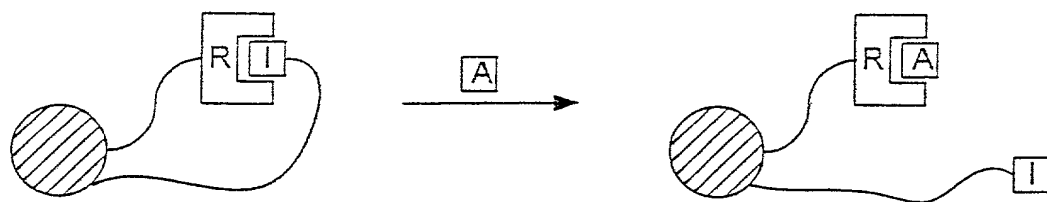


FIG. 55A

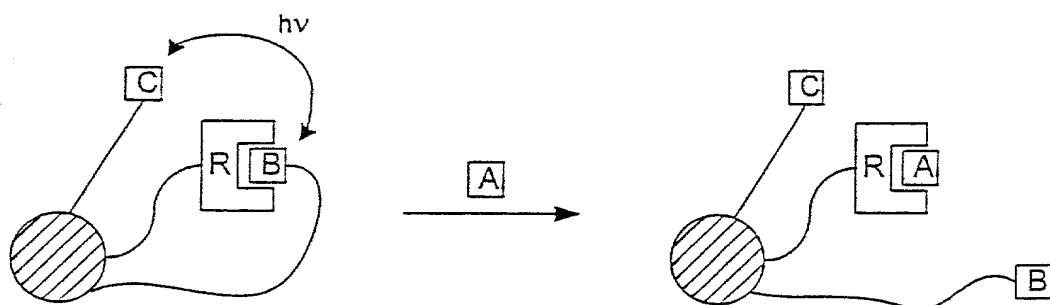


FIG. 55B

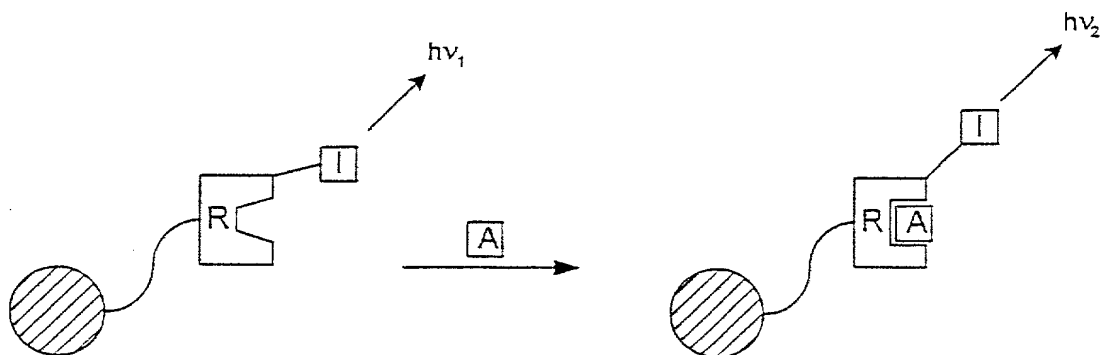


FIG. 55C

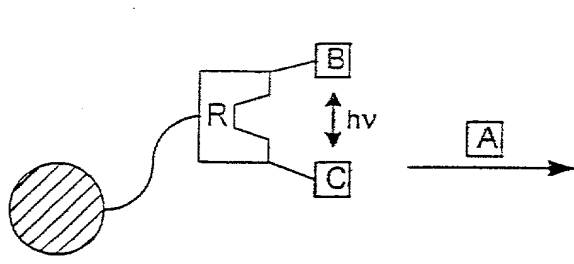


FIG. 55D

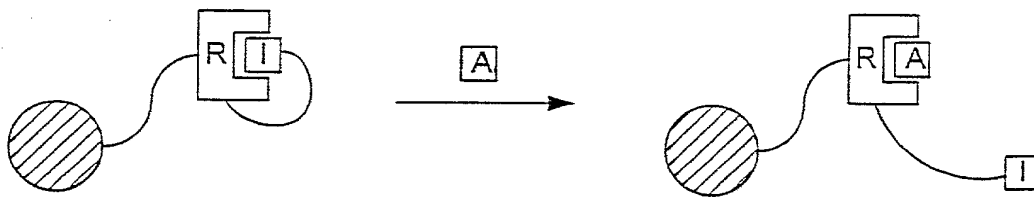


FIG. 55E

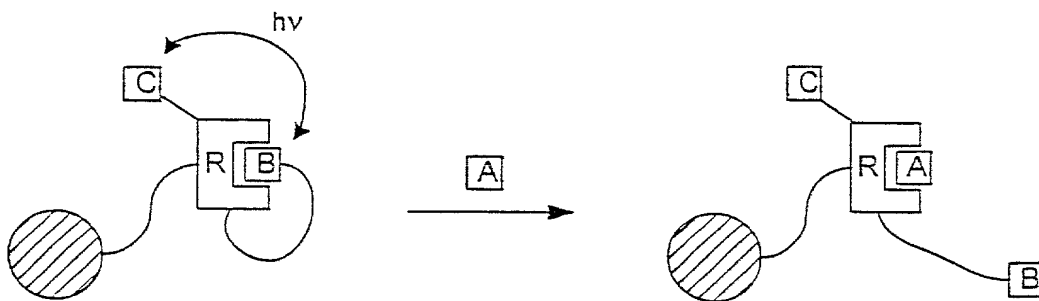


FIG. 55F

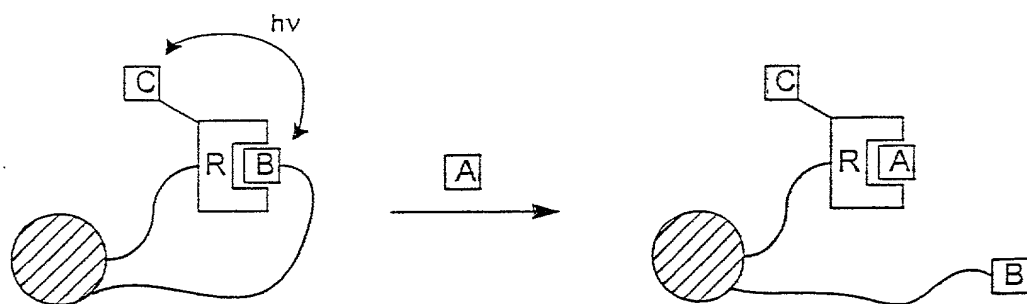


FIG. 55G

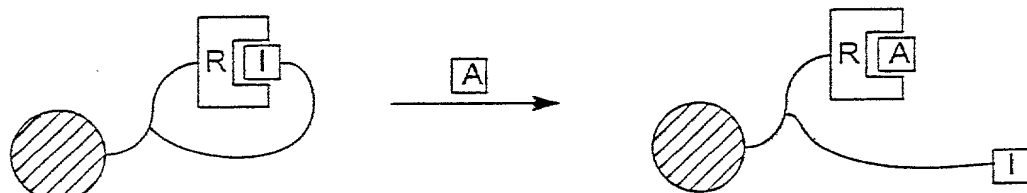


FIG. 55H

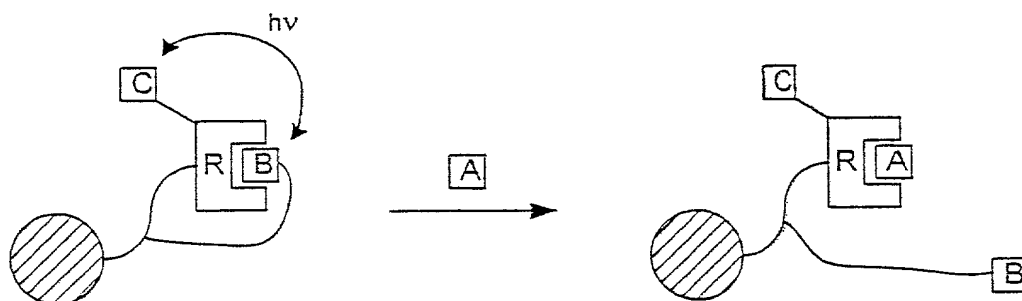


FIG. 55I

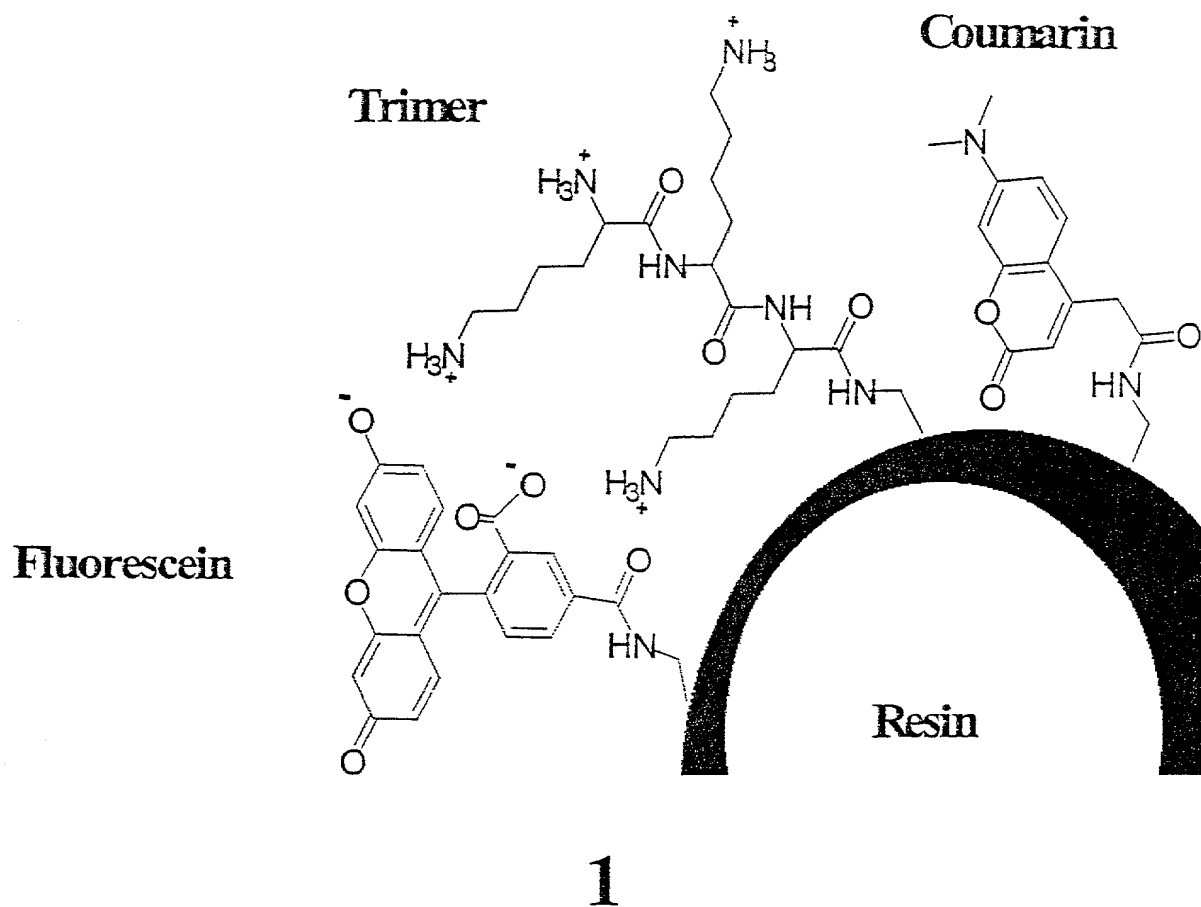


FIG. 56

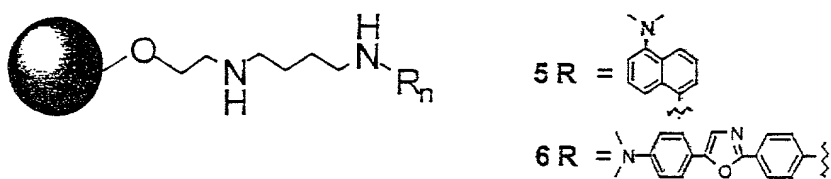
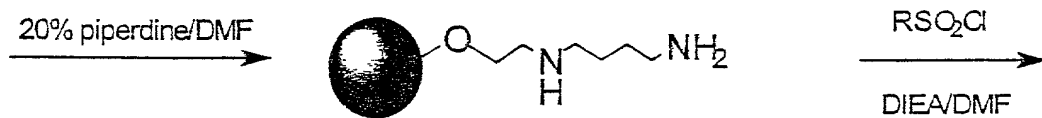
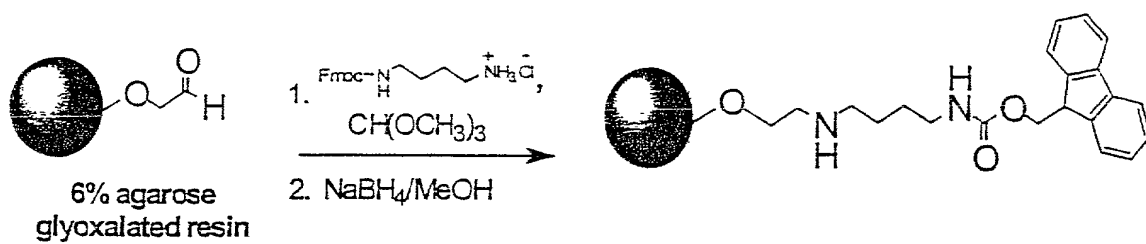


FIG. 57

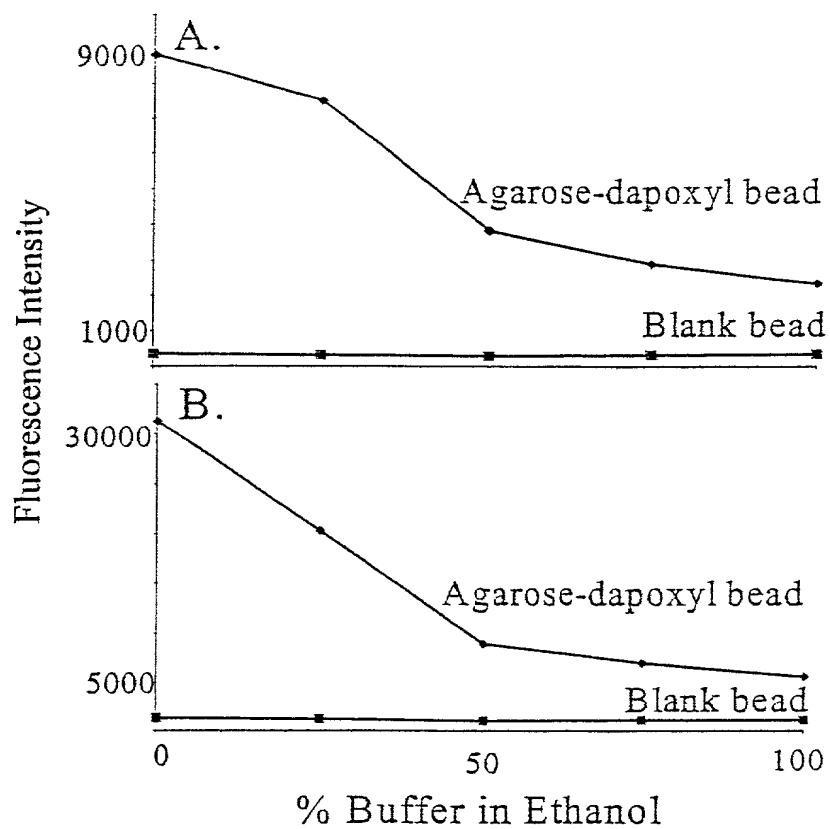


FIG. 58

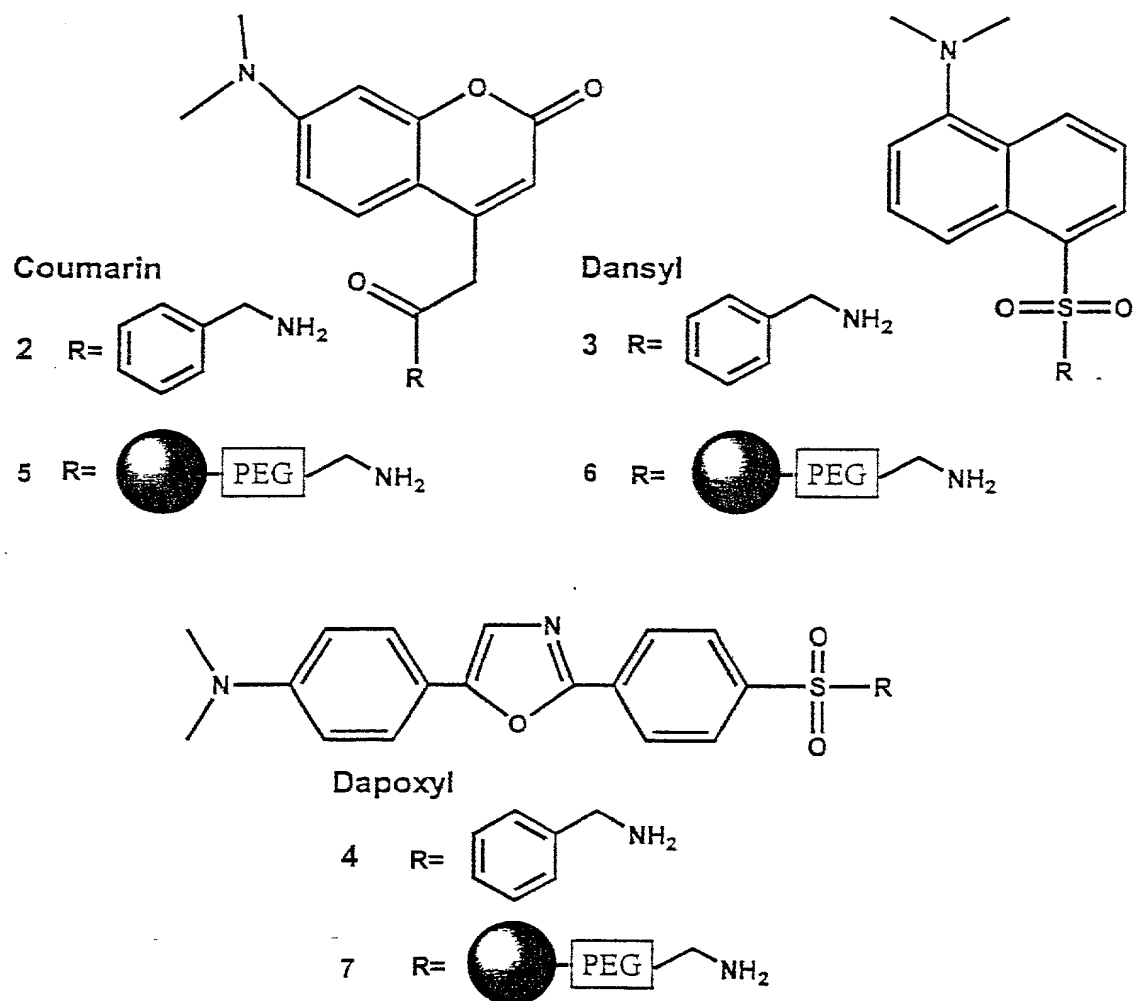


FIG. 59

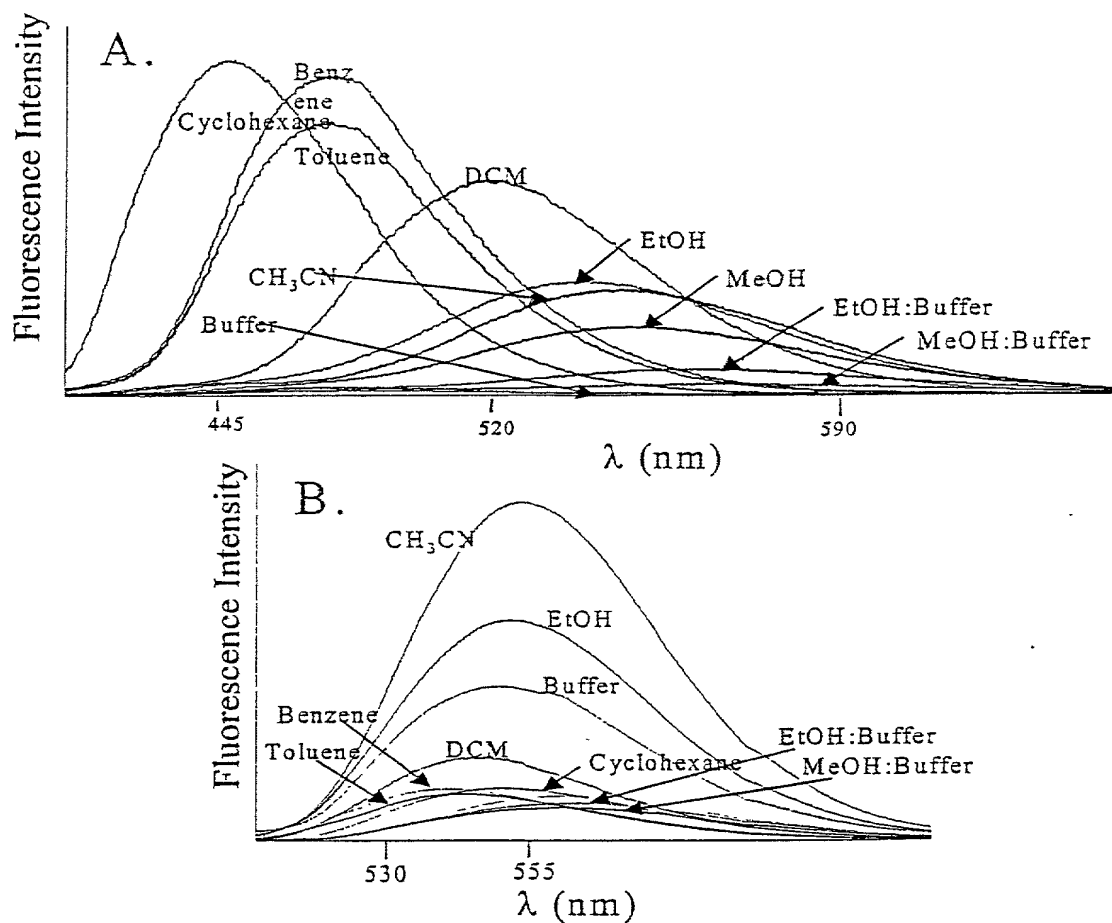
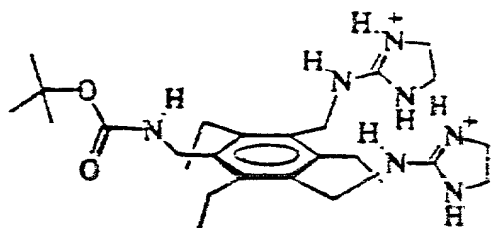
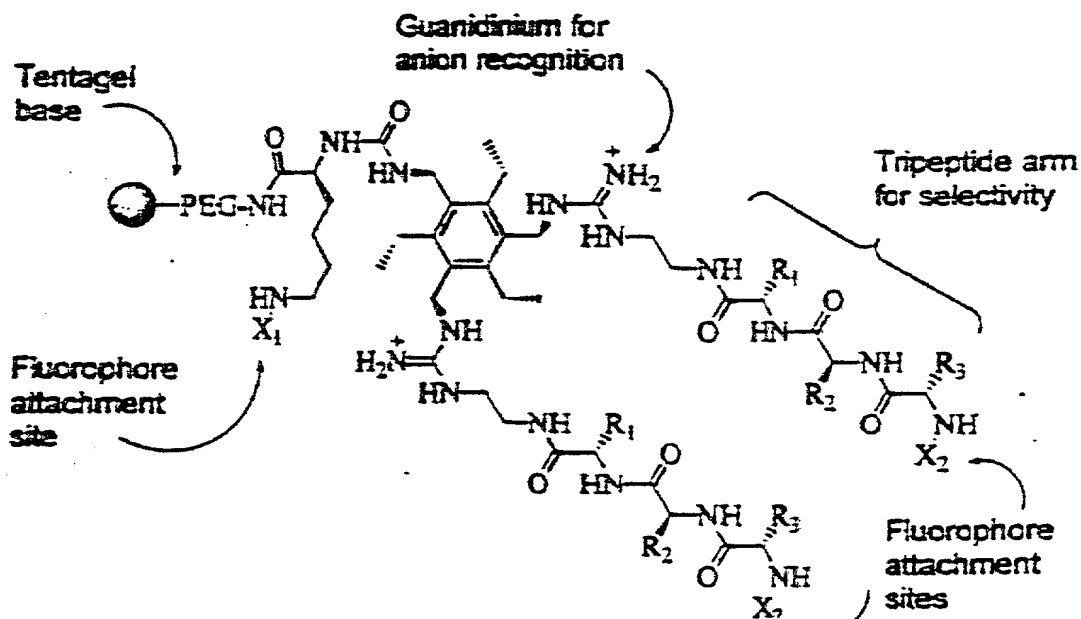


FIG. 60



1



2: $X_1 = X_2 = H$

3: $X_1 =$

$X_2 =$

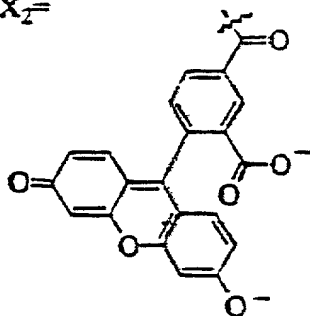
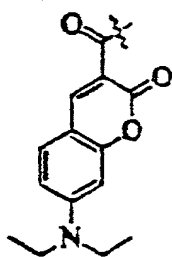


FIG. 61

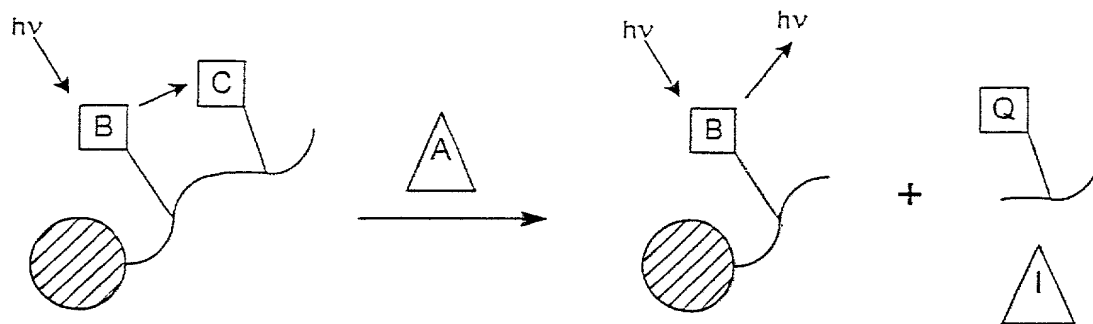


FIG. 62A

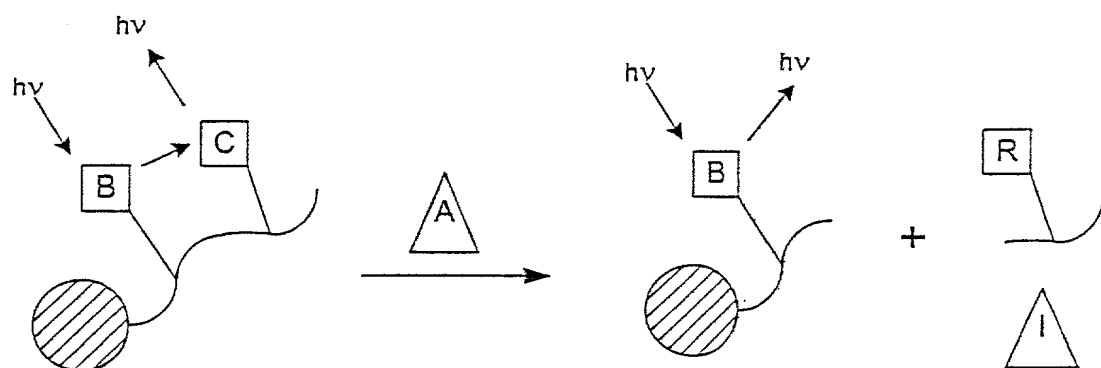


FIG. 62B

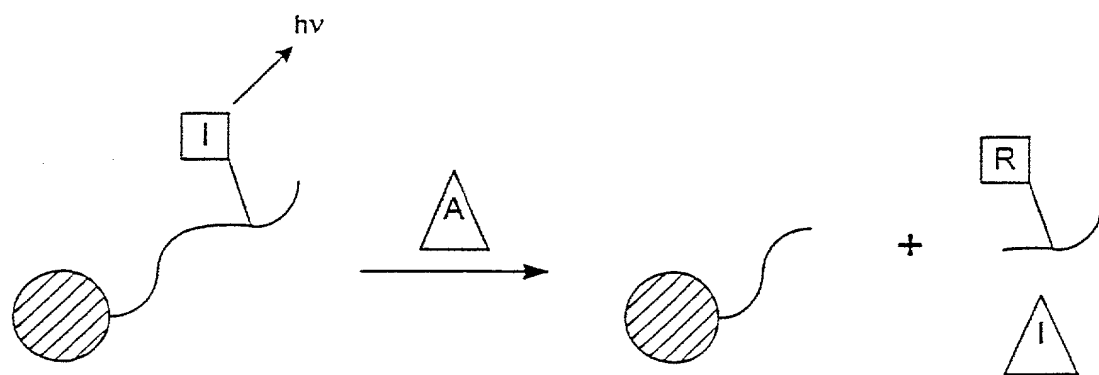


FIG. 62C

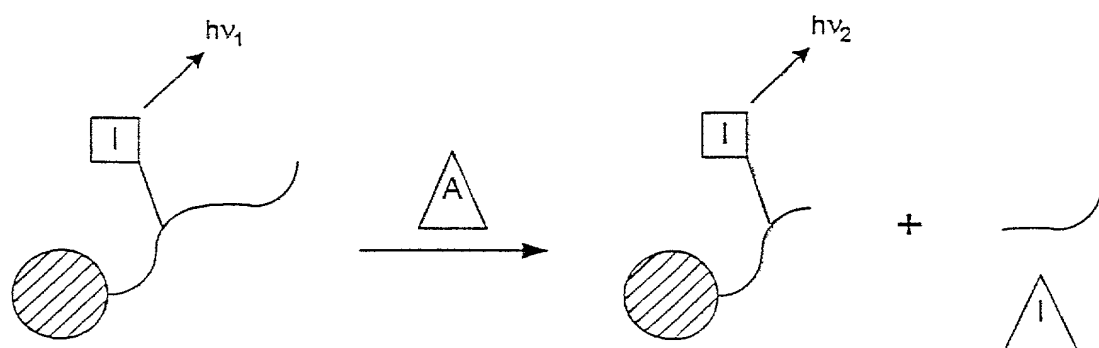


FIG. 62D

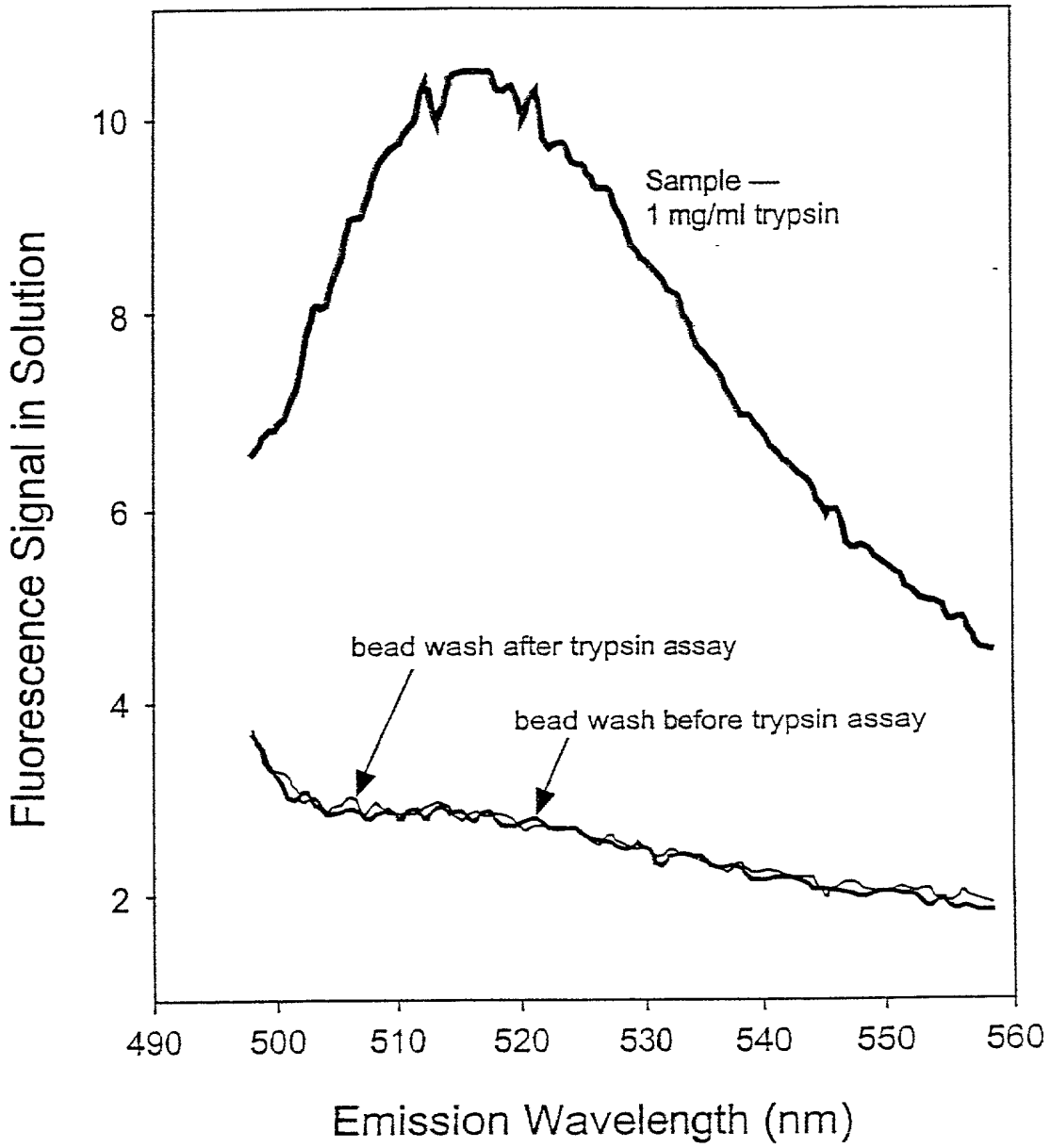


FIG. 63

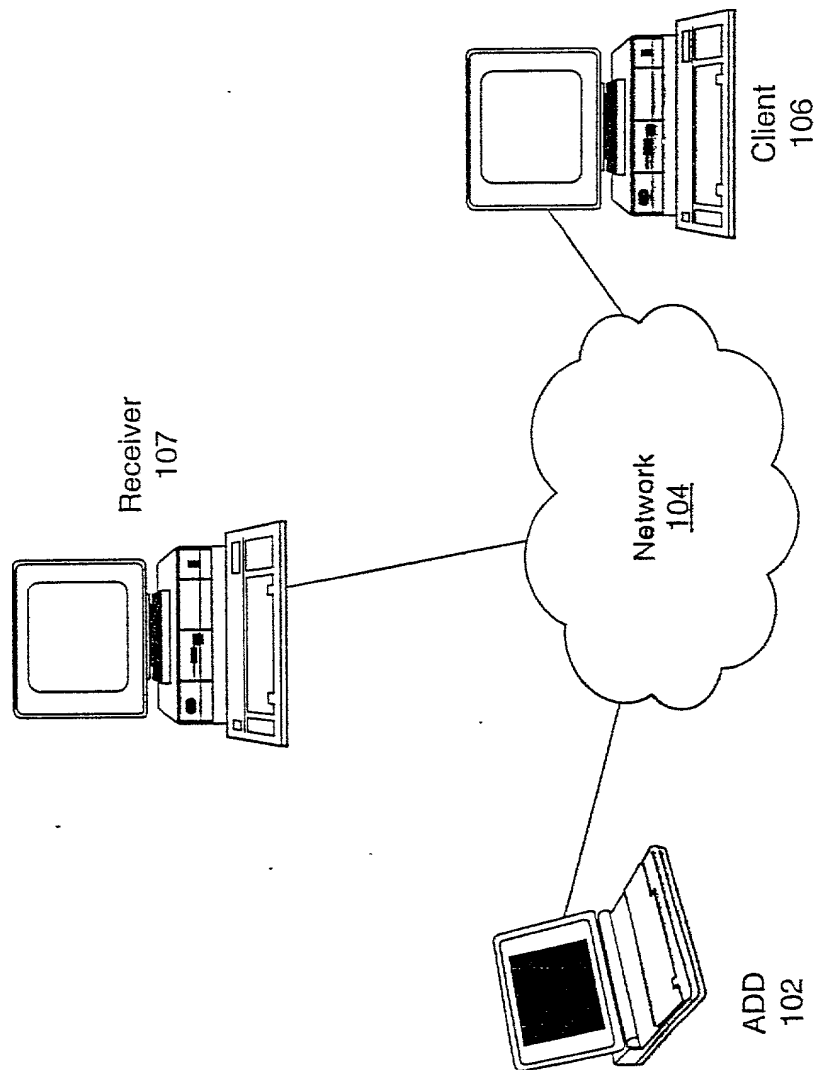


FIG. 64

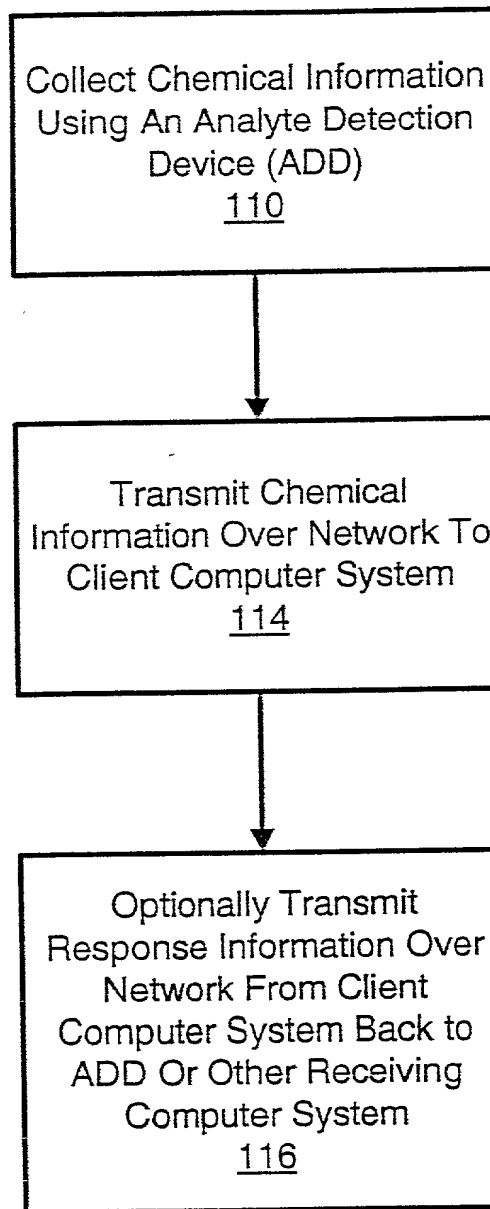


FIG. 65

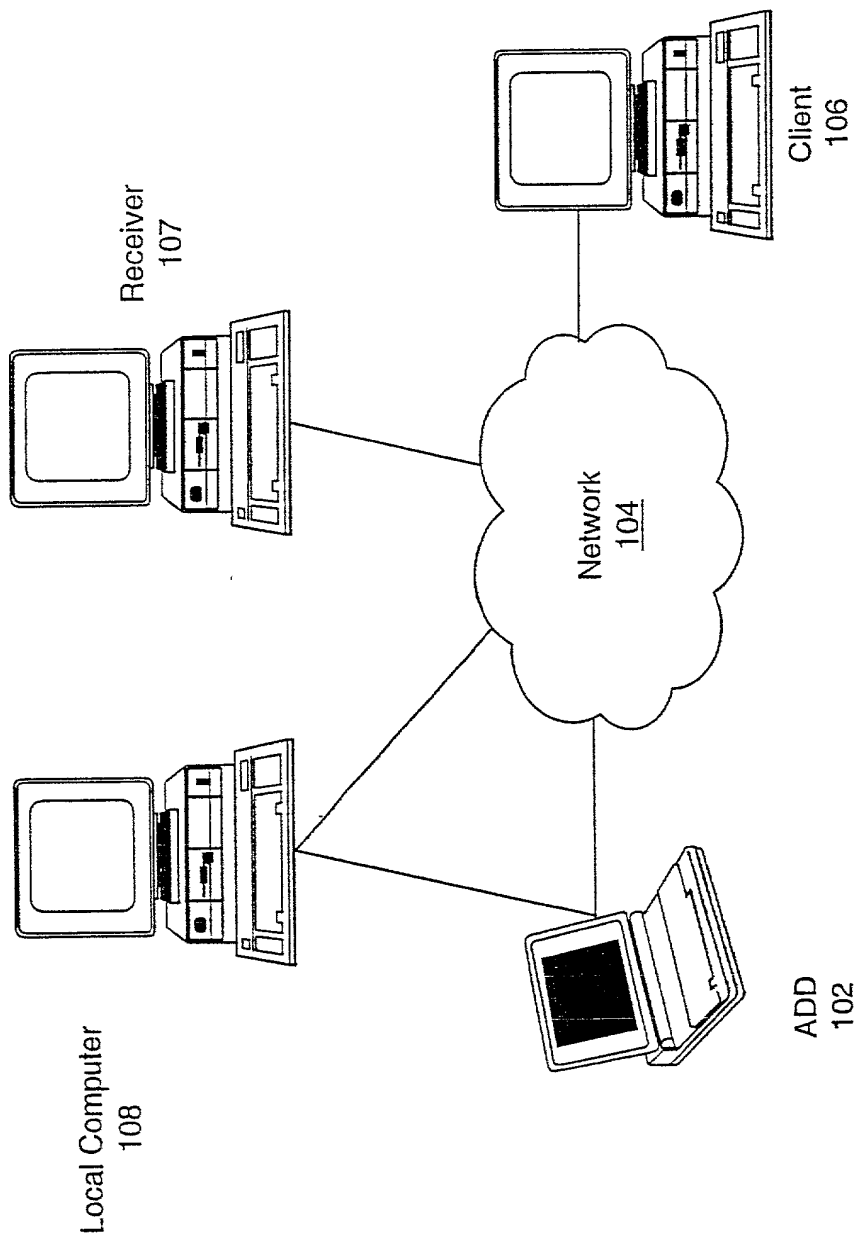


FIG. 66

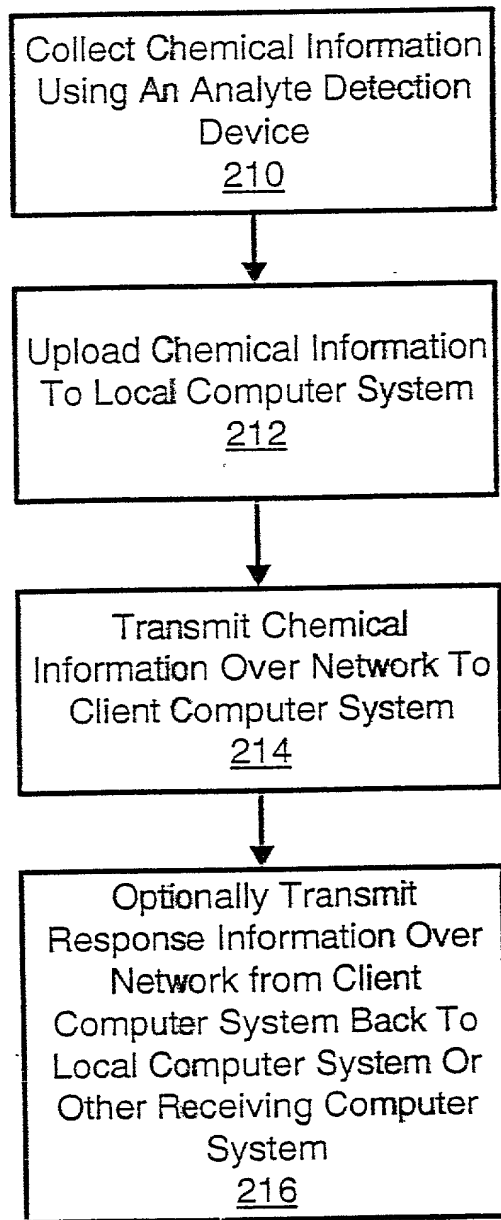


FIG. 67

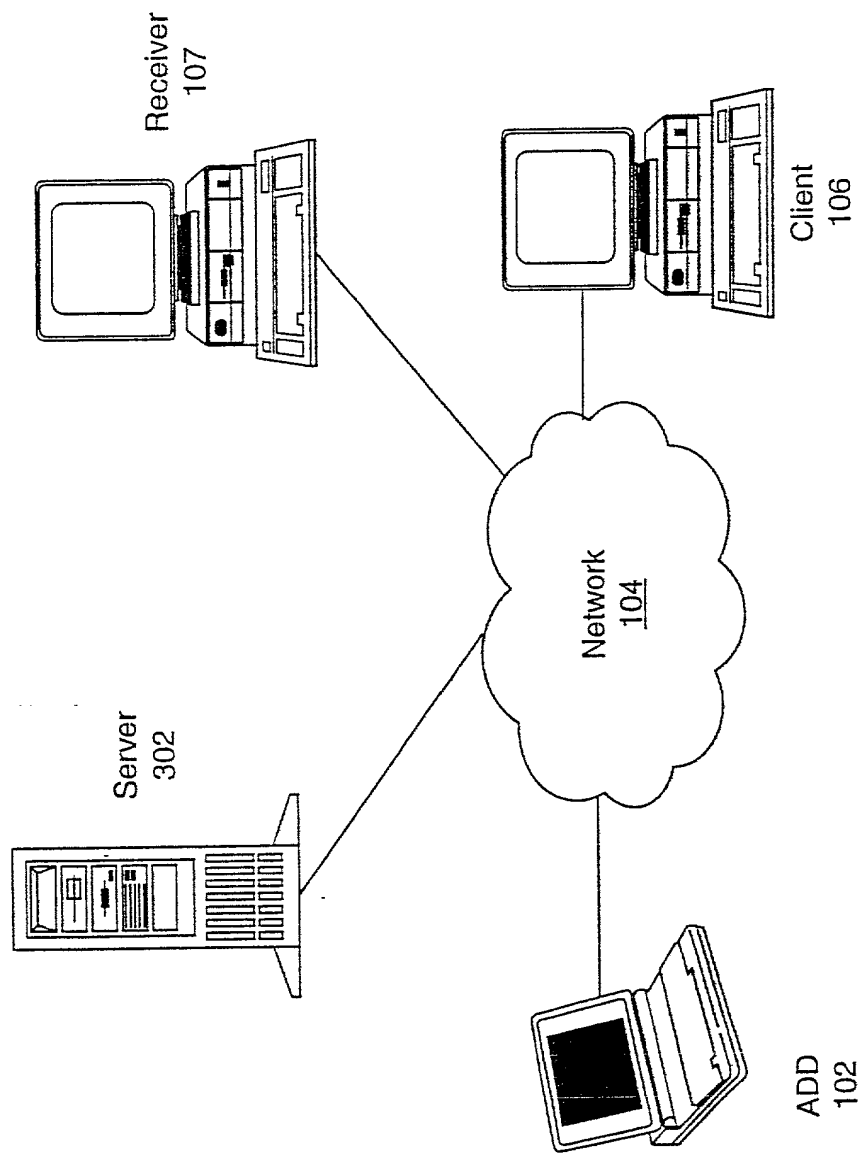


FIG. 68

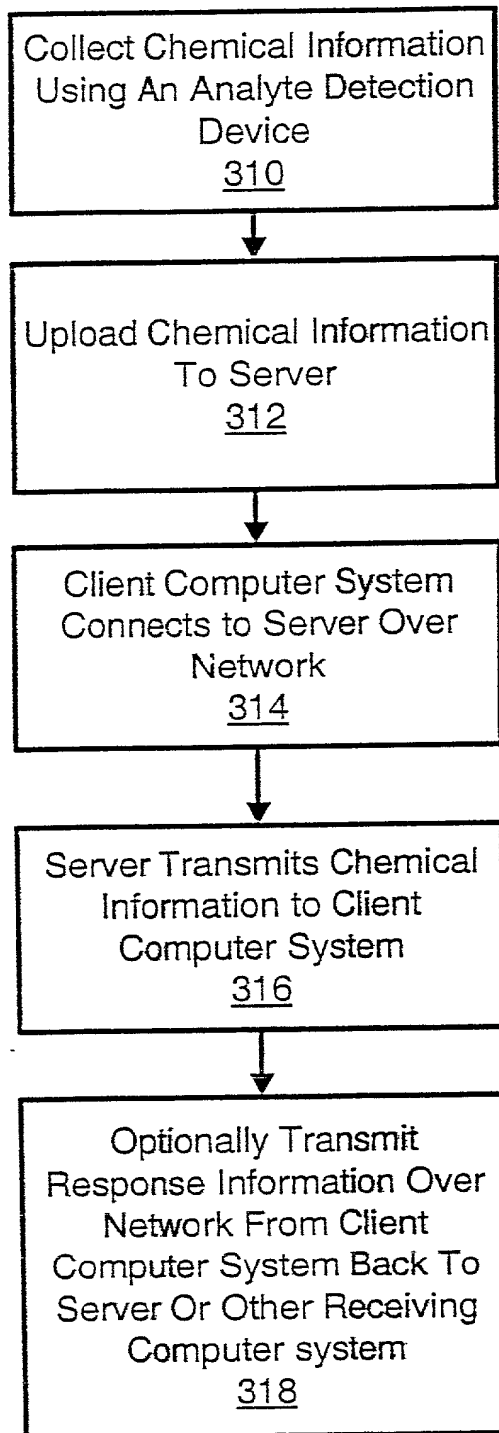


FIG. 69

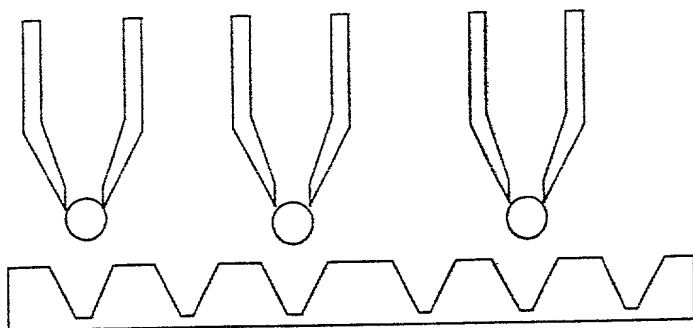


FIG. 70A

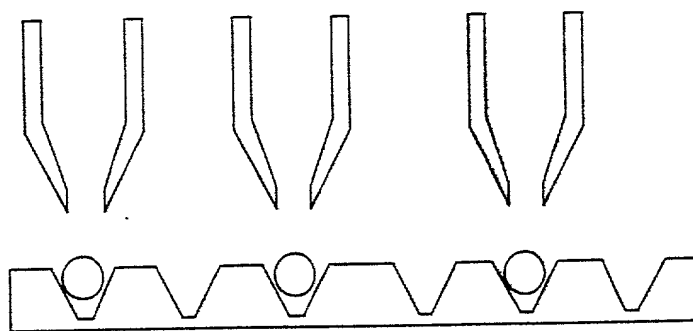


FIG. 70B

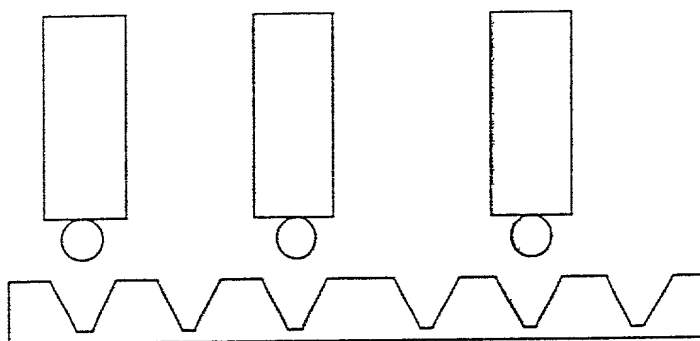


FIG. 71A

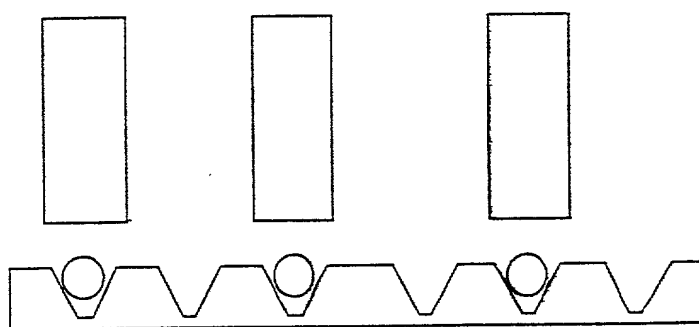


FIG. 71B

10072800-013102

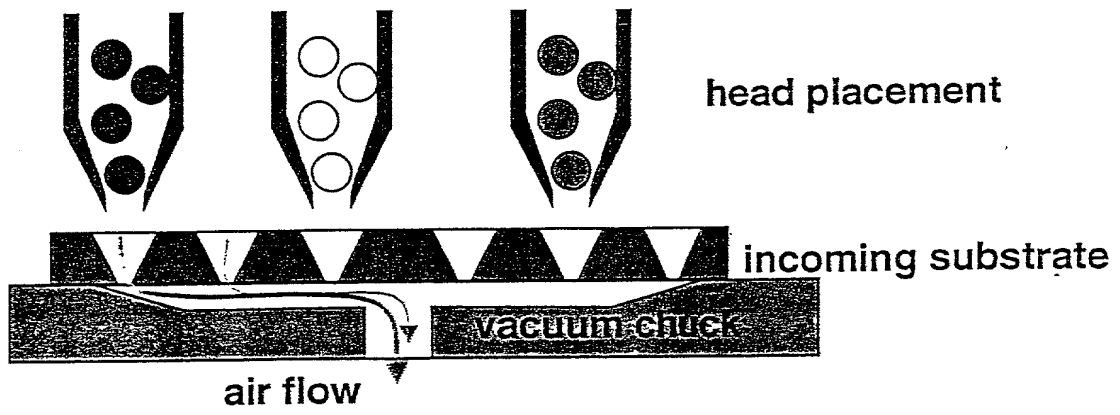


FIG. 72A

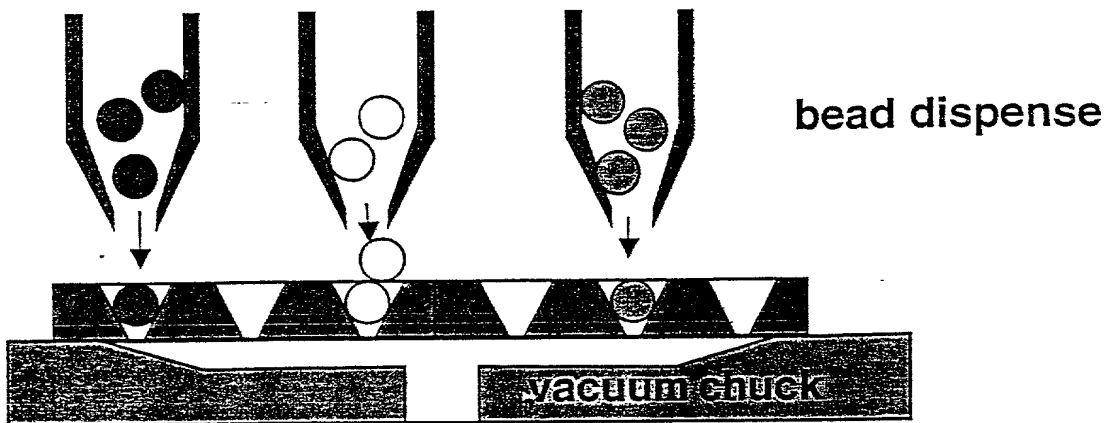


FIG. 72B

10072800-043402

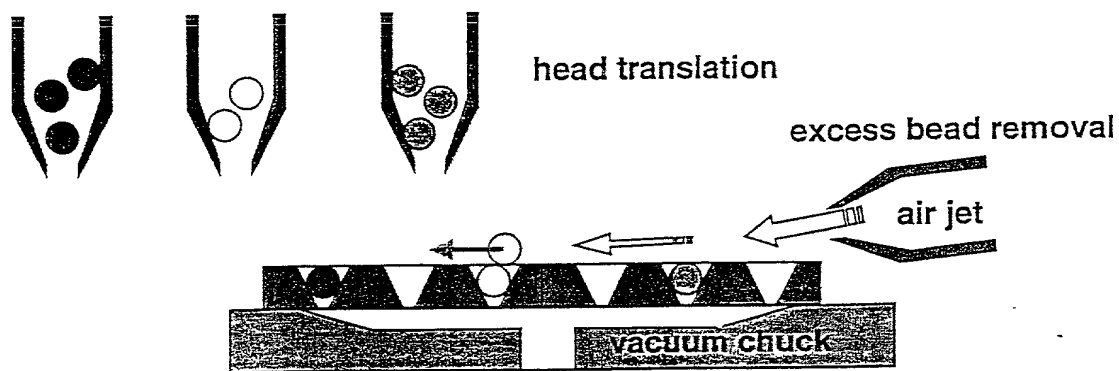


FIG. 72C

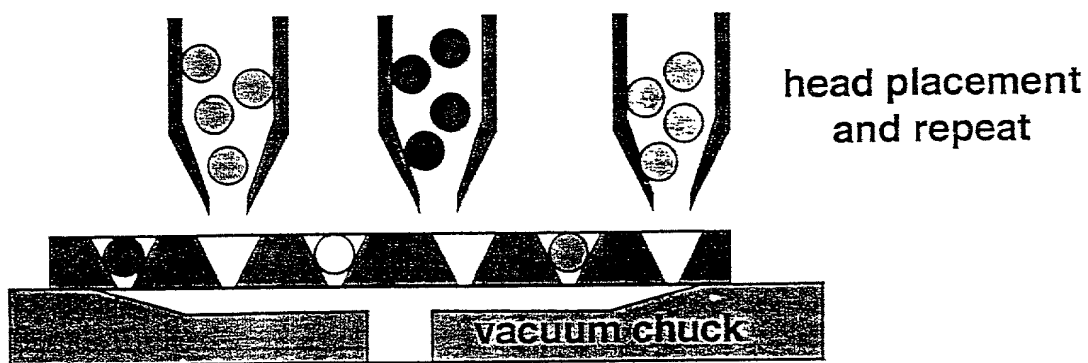


FIG. 72D

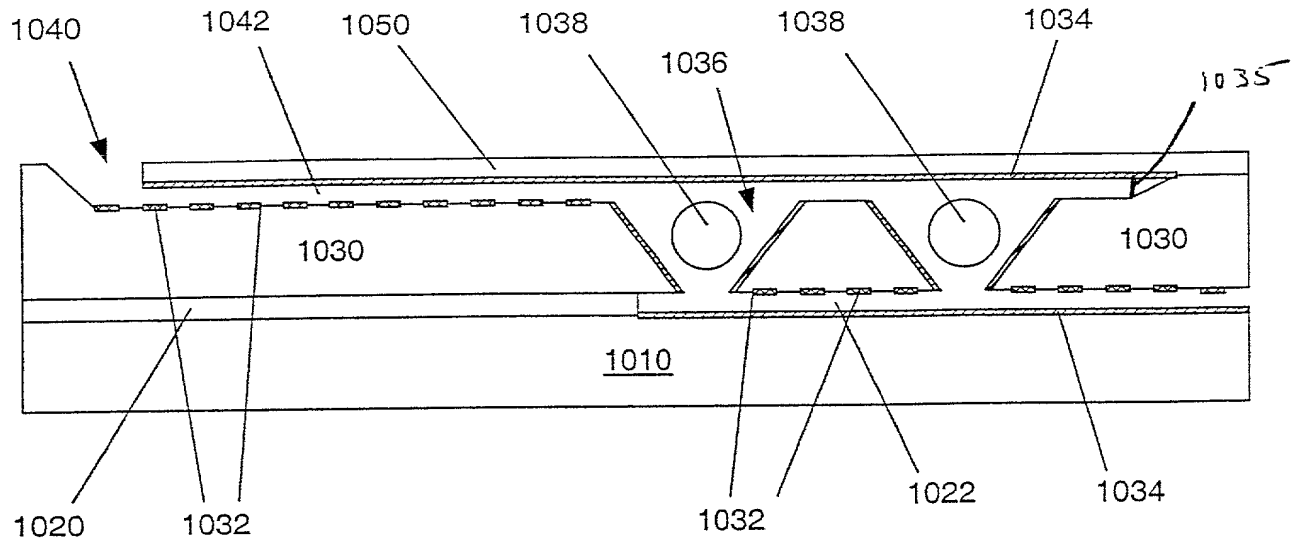


FIG. 73

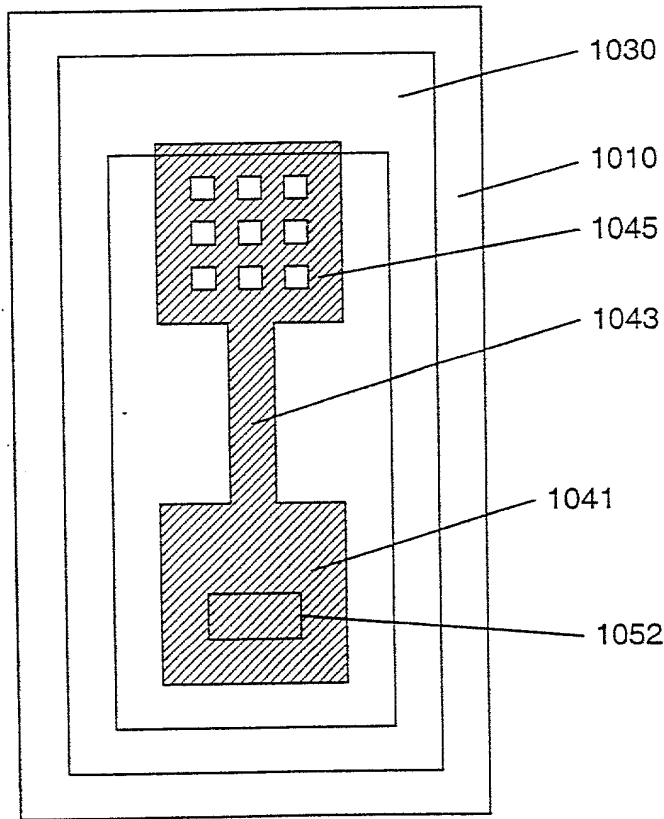


FIG. 74A

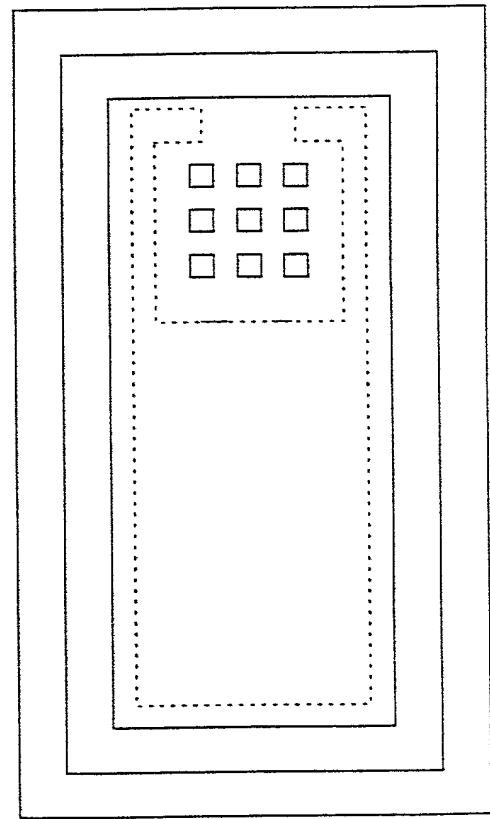


FIG. 74B

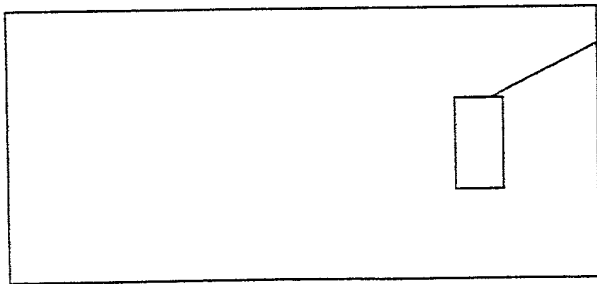


FIG. A
75

1052

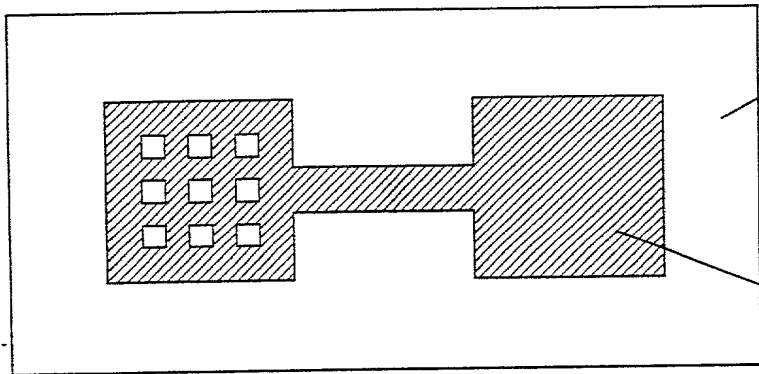


FIG. B
75

1031

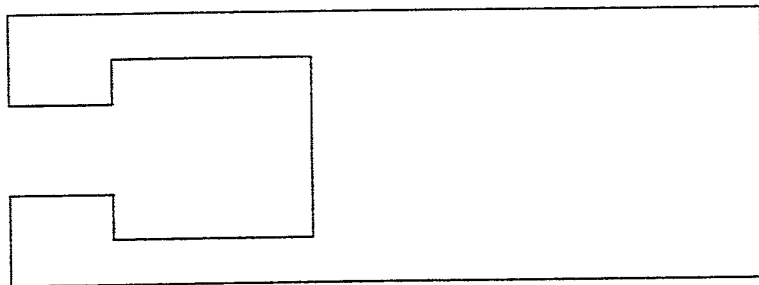


FIG. C
75

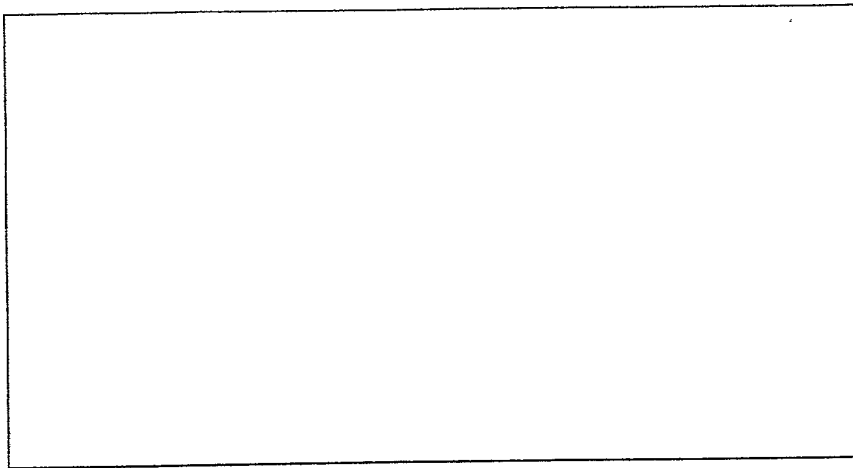


FIG. D
75

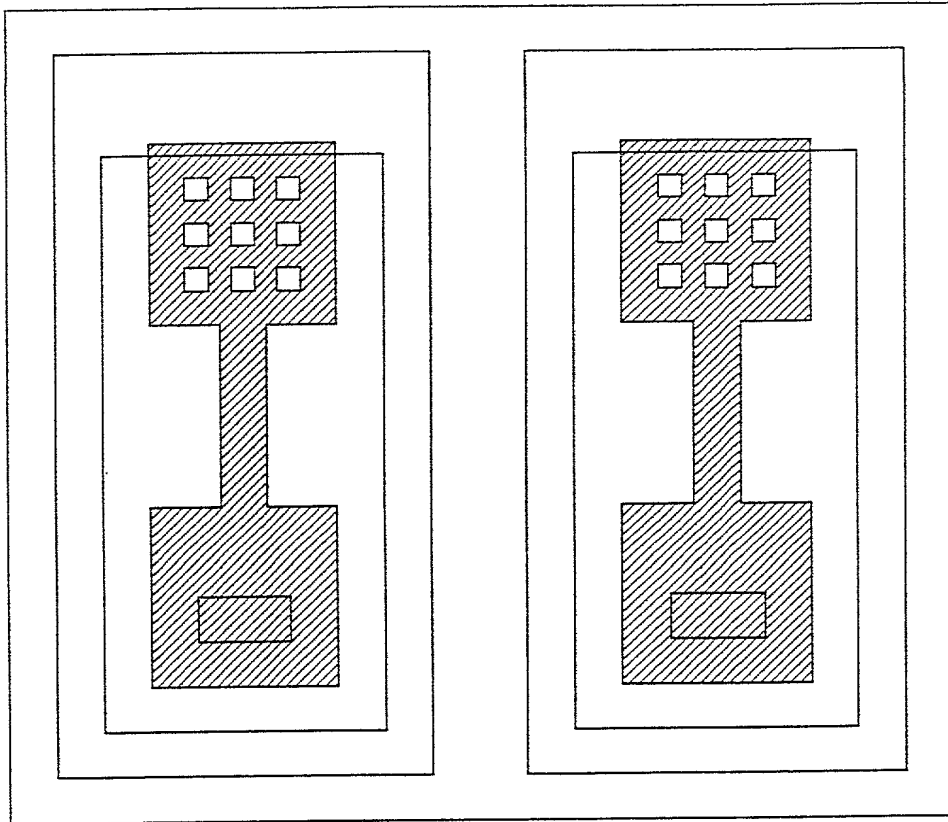


FIG. 76

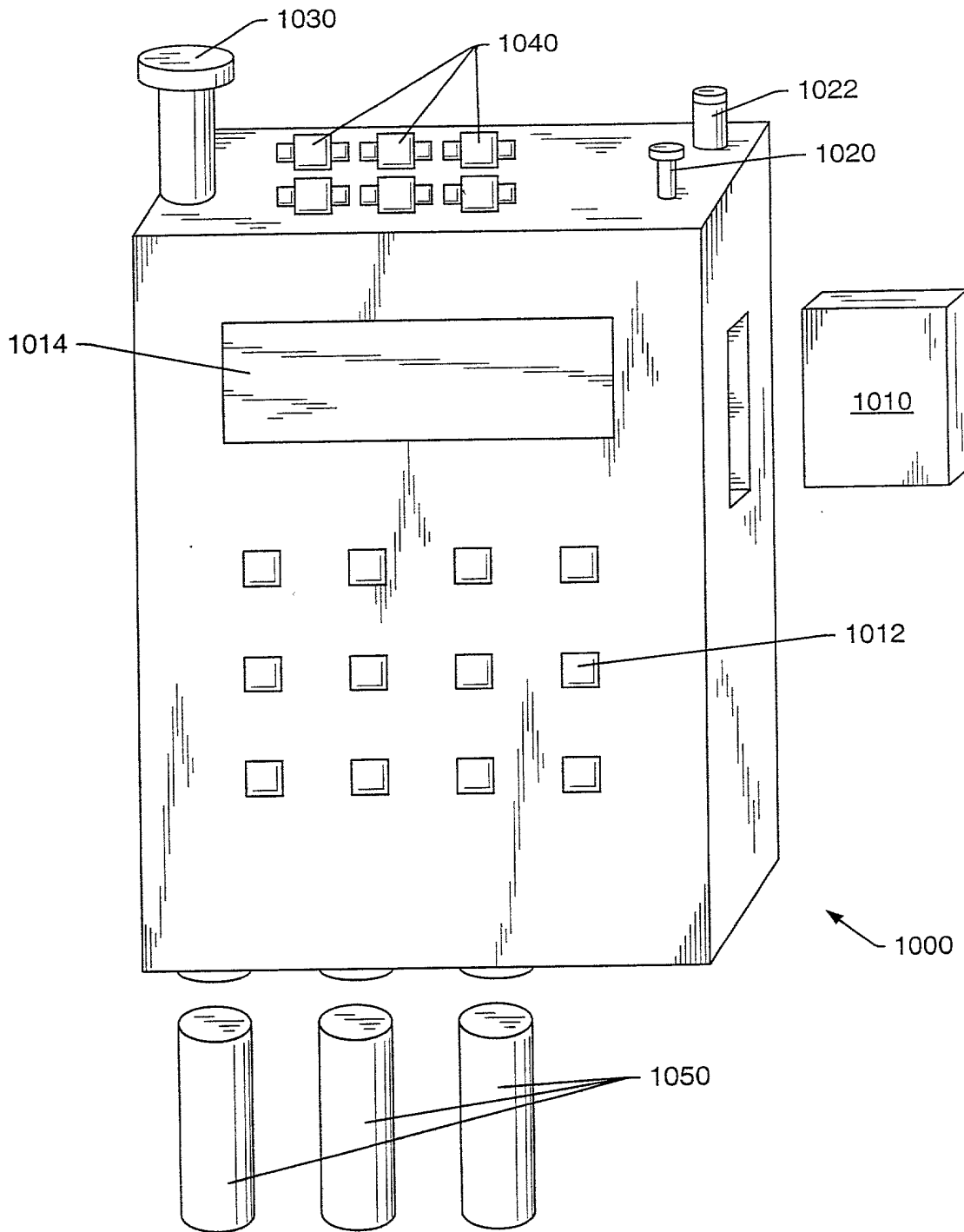


FIG. 78

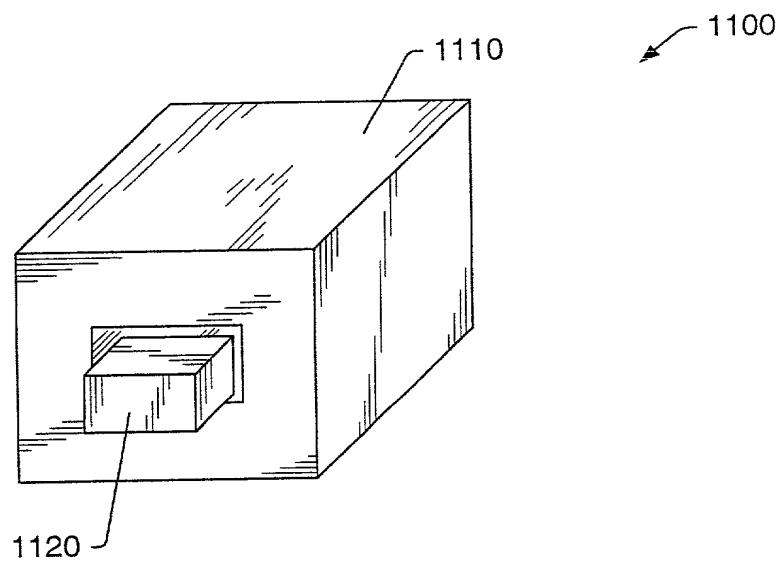


FIG. 79A

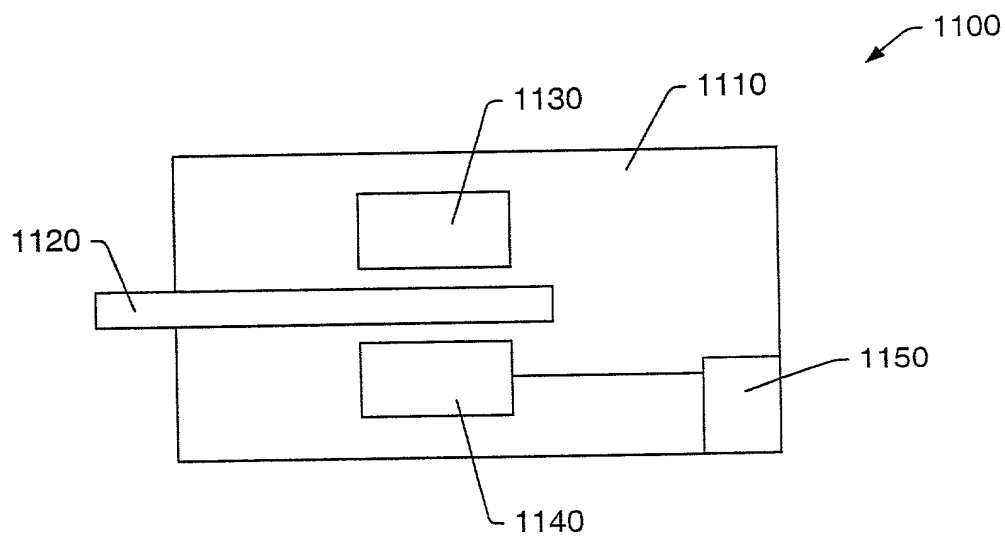
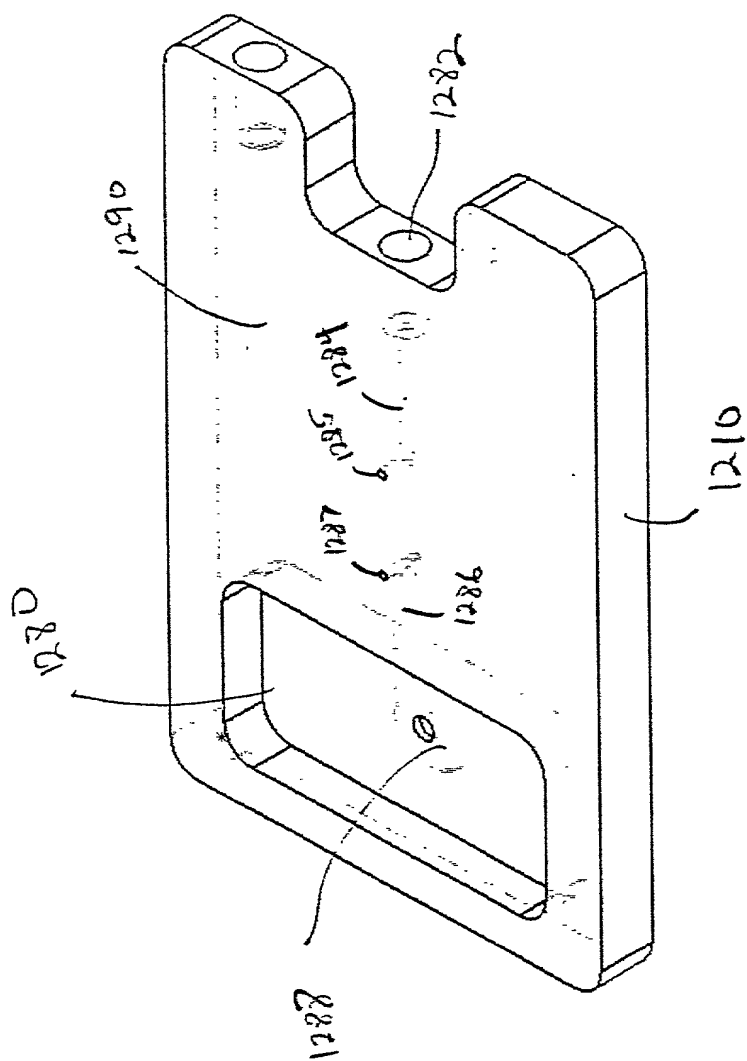


FIG. 79B



18.911

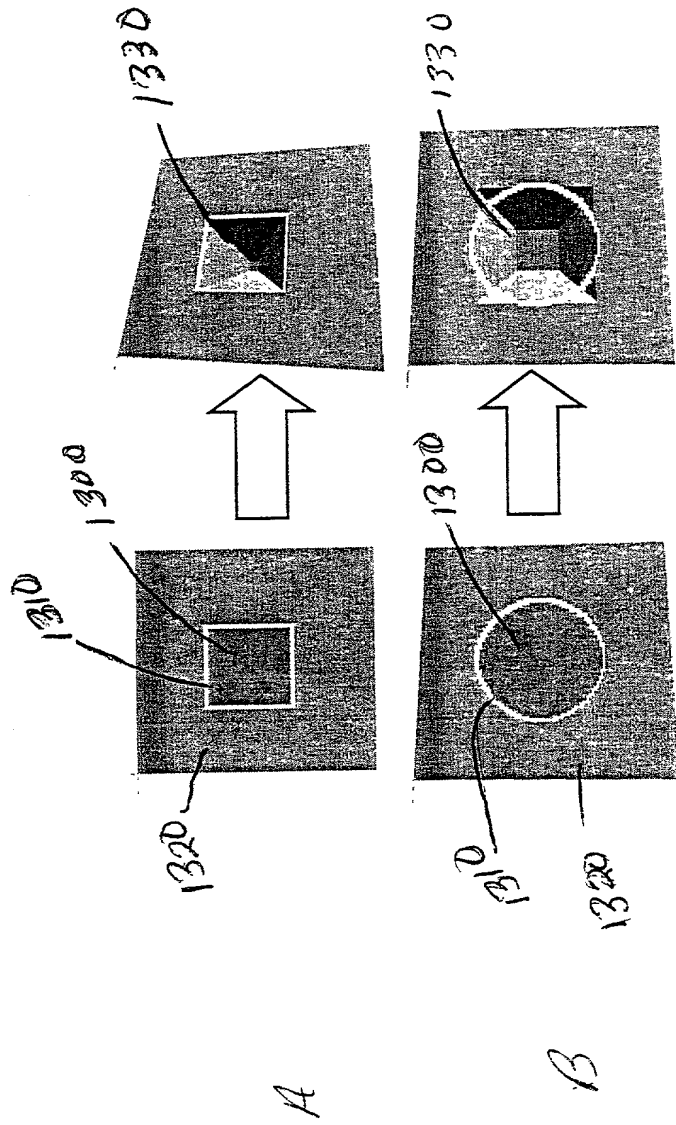


FIG. 82

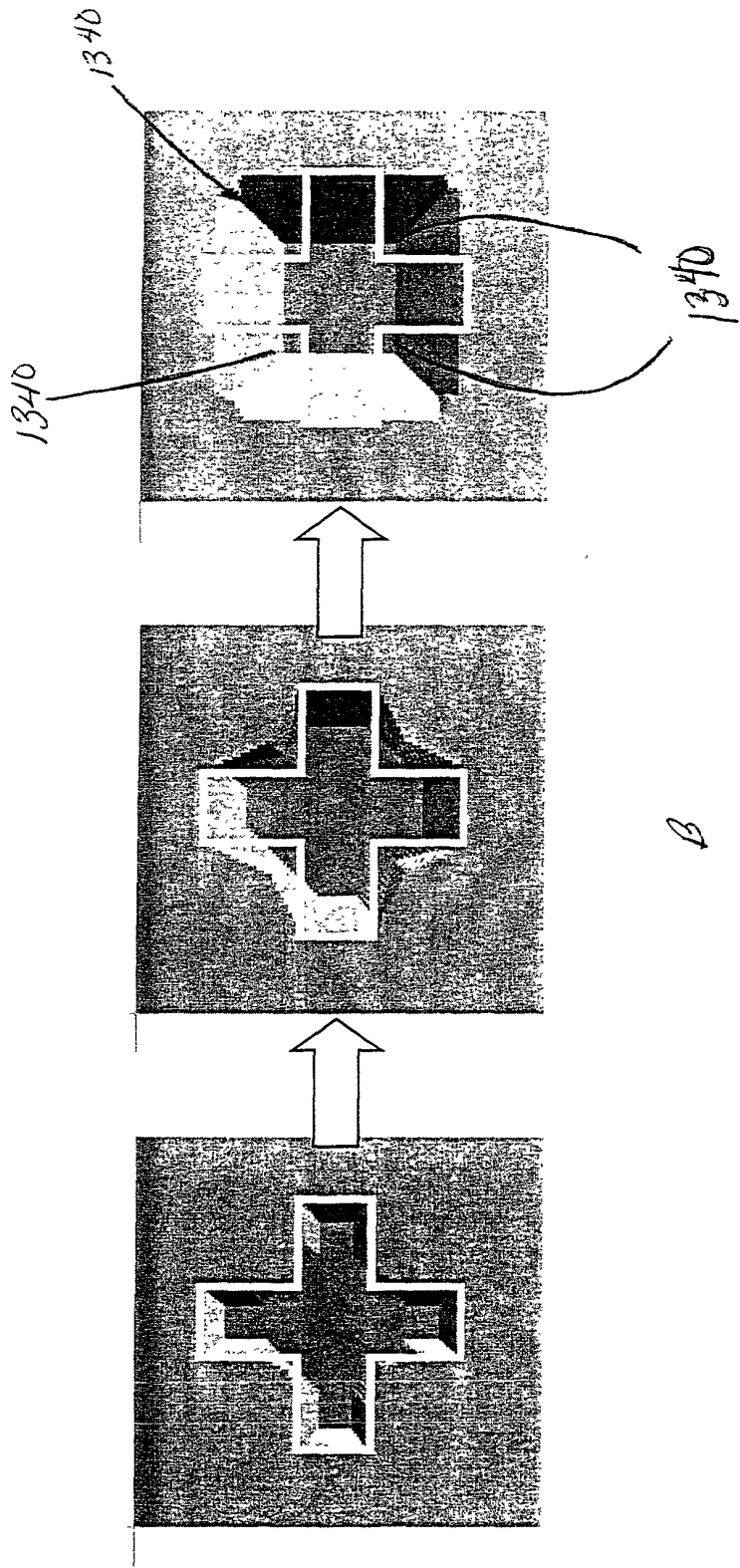
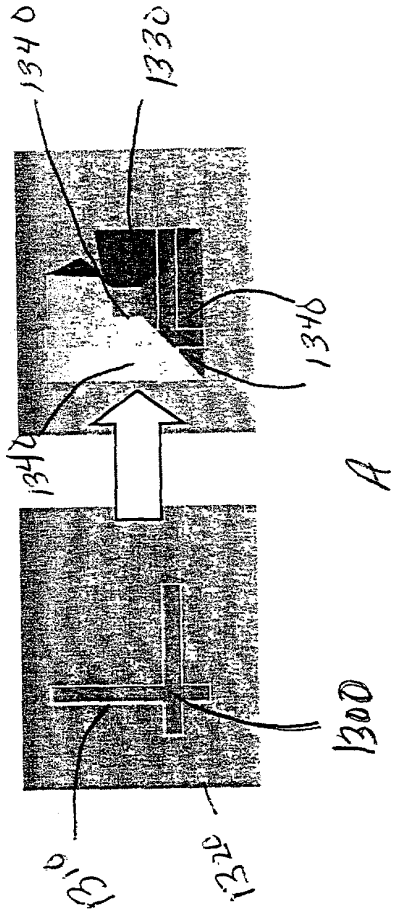


FIG. 83

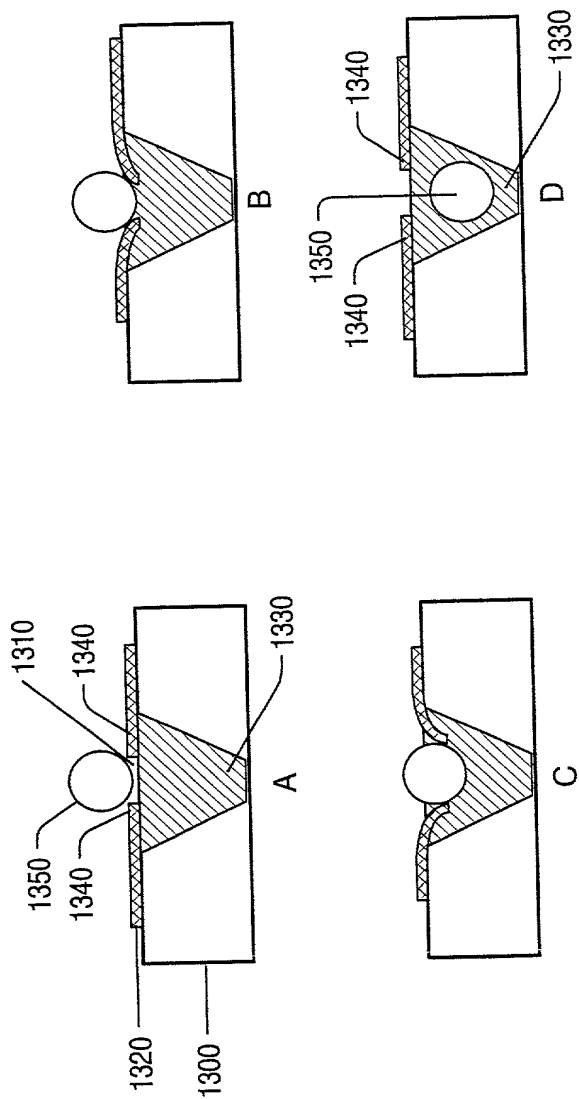
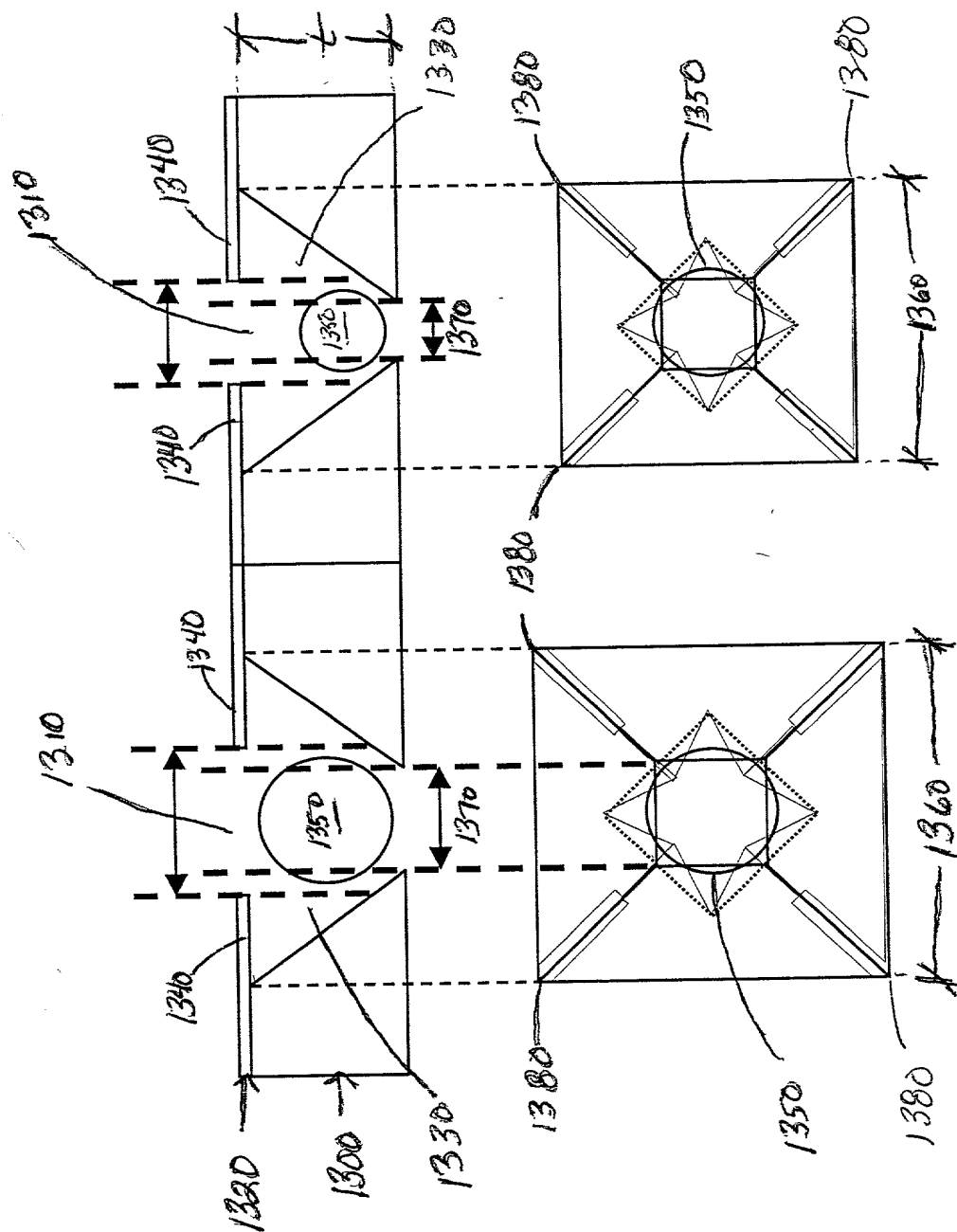
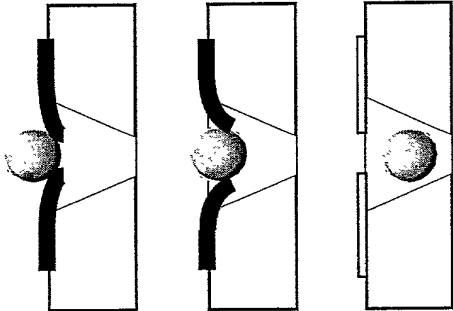
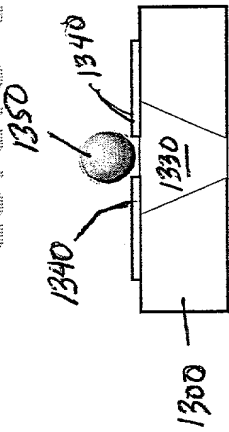


FIG. 85

Variable	Mean	SD	Min	Max
Age	34.5	10.5	20	55
Gender	0.5	0.5	0	1
Marital status	0.5	0.5	0	1
Education	12.5	1.5	10	15
Income	1500	500	1000	2500
Health status	0.5	0.5	0	1
Smoking status	0.5	0.5	0	1
Alcohol consumption	0.5	0.5	0	1
Exercise frequency	0.5	0.5	0	1
Stress level	0.5	0.5	0	1
Sleep quality	0.5	0.5	0	1
Work satisfaction	0.5	0.5	0	1
Life satisfaction	0.5	0.5	0	1
Depression score	10	10	0	30
Anxiety score	10	10	0	30
Quality of life score	50	10	30	70



FA.86



A

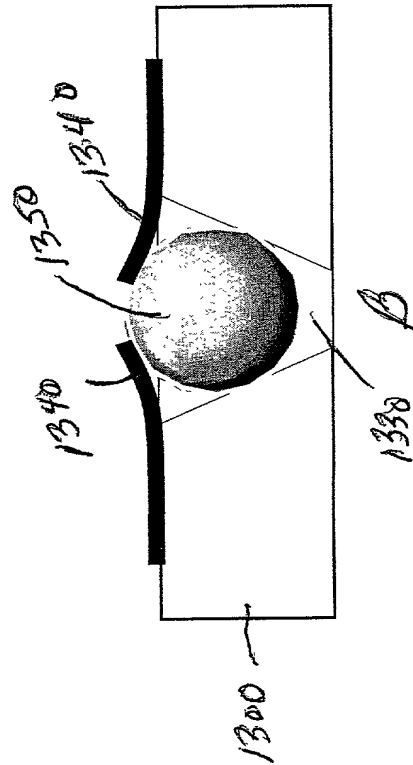


FIG. 87